The OIL WEEKLY

A Journal for
Oil and Gas Producers and Field Men

ADVERTISER'S INDEX
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NEW YORK
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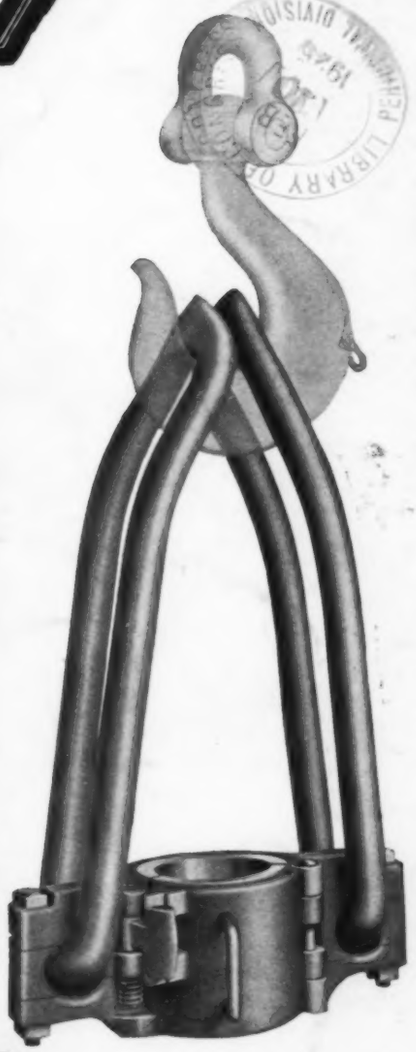
It's a Wilson



Even with all its exclusive advantages, the fast working Wilson spring latch side door elevator is the simplest, safest, most efficient ever designed.

Ask for Literature

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It's a Wilson
Distributed By WILSON OIL TOOLS CORPORATION
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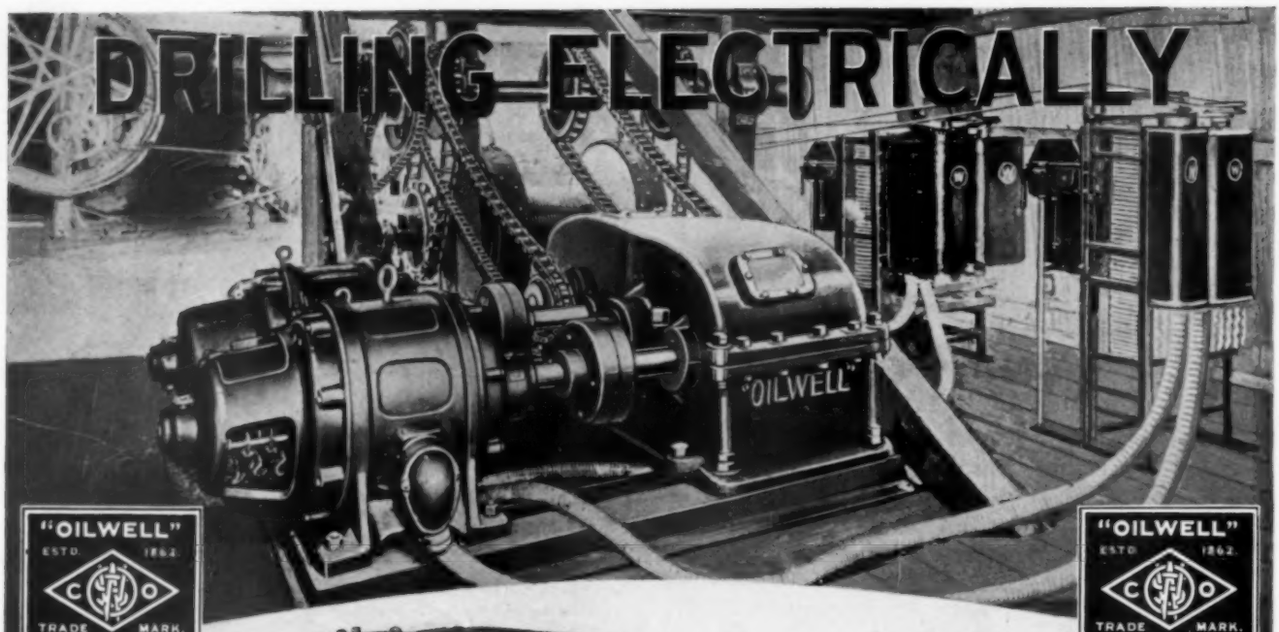
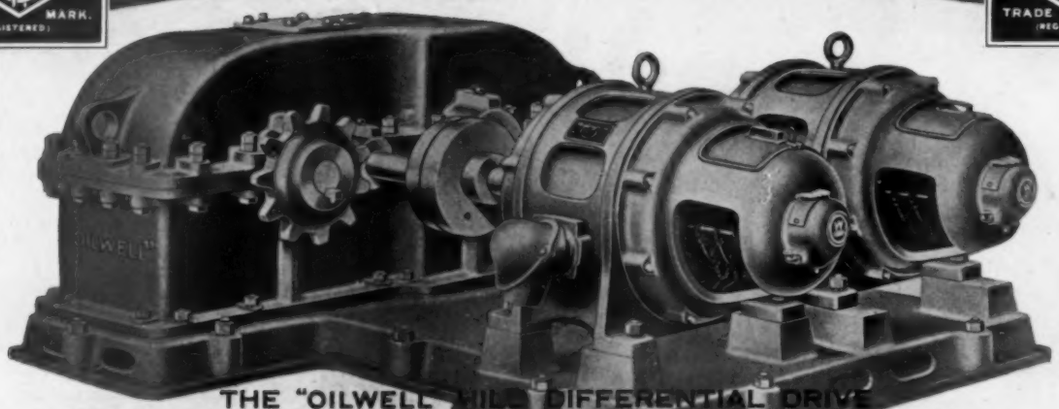
DRILLING ELECTRICALLY



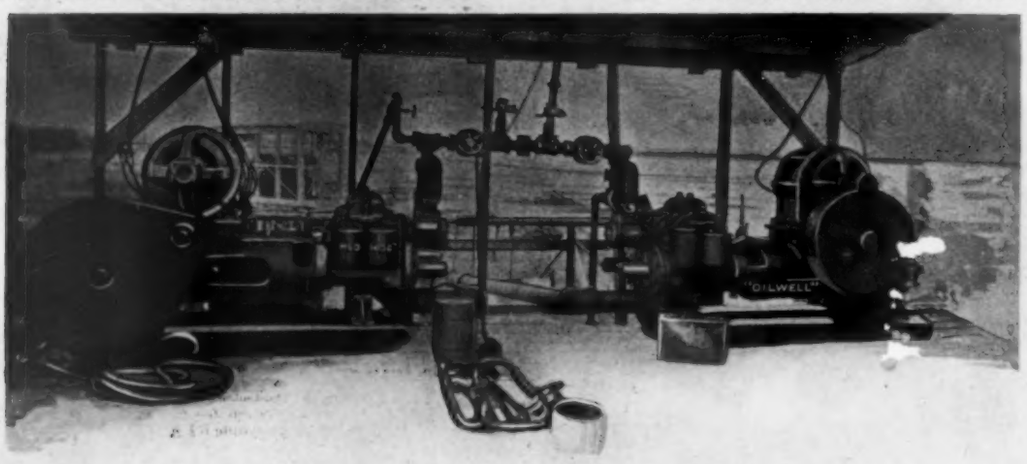
"OILWELL" ESTD. 1862 TRADE MARK. (REGISTERED)

"OILWELL" ESTD. 1862 TRADE MARK. (REGISTERED)



THE "OILWELL" HILD DIFFERENTIAL DRIVE

The "OILWELL" Hild Differential Drive is an electrical [illegible] which is used in connection with the standard rotary draw works or hoist in exactly the same way as a steam drilling engine is used—but in addition, it ***automatically*** feeds the bit, and ***automatically*** [illegible]ates or varies the bit pressure according to the [illegible]ation in formations encountered. For complete design, construction, and operation data, write for Bulletin No. 60 or get a copy at any of our 100 Branches.



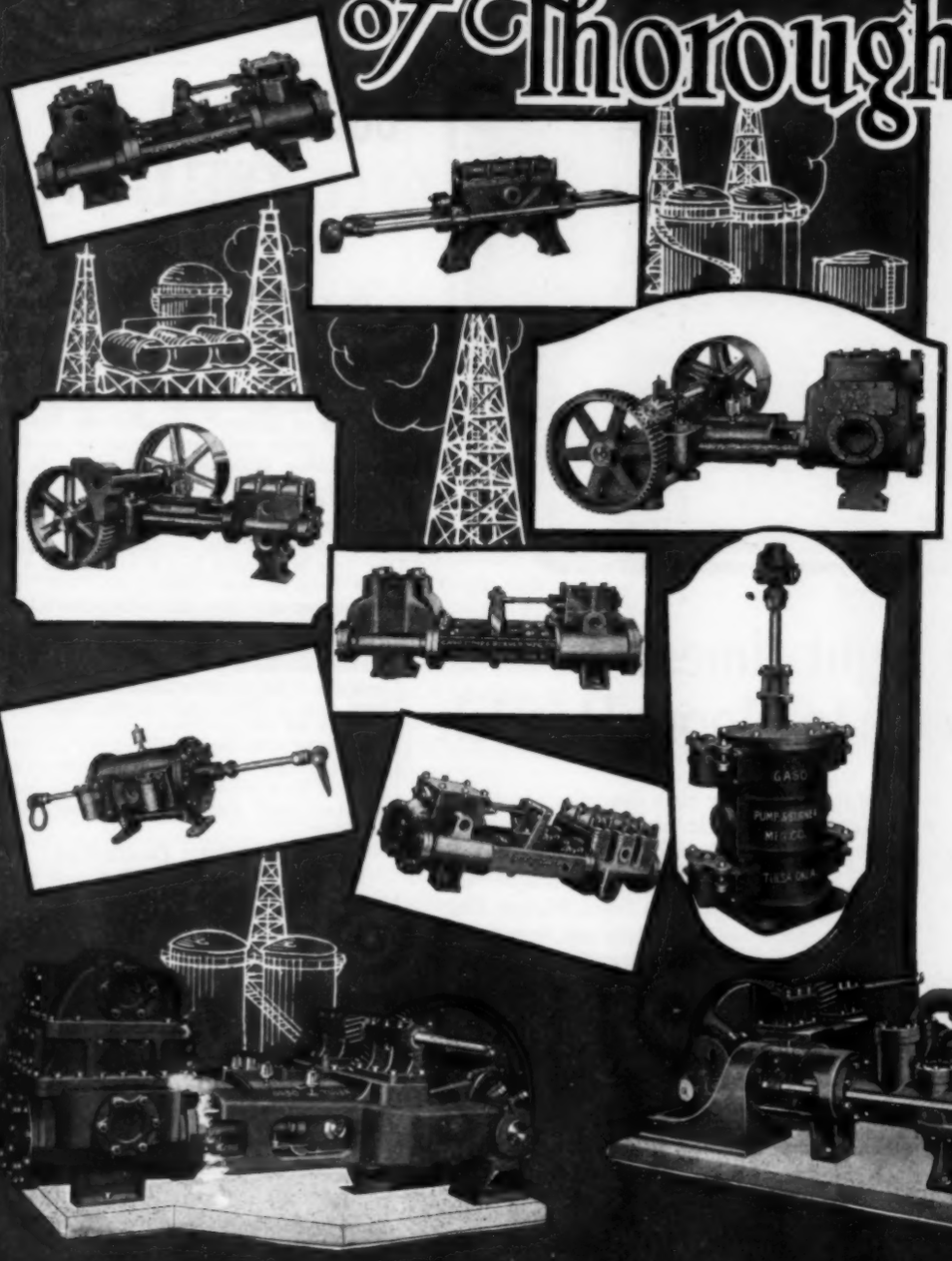
OIL WELL SUPPLY CO.

NEW YORK—LOS ANGELES—PITTSBURGH, U.S.A.—SAN FRANCISCO—TAMPICO—LONDON

WORLD'S OLDEST AND LARGEST MANUFACTURERS OF OIL FIELD EQUIPMENT

THE OIL WEEKLY. Issued weekly by the Gulf Publishing Co., 1716 Dallas Ave., Houston, Texas. Subscription price $1.00 per year; 10 cents per copy. Entered as second-class mail matter December 23, 1916, at the post office at Houston, Texas, under act of March 3, 1879.

A Complete Line of Thoroughbreds



Another important feature of the Gaso line is its COMPLETENESS

No matter what pumping problem comes up, there is a member of the Gaso family ready to give typical Gaso service.

Every experienced pump user knows what that means: fewer parts, reserve strength, ready accessibility of valves and the lowest operating costs obtainable.

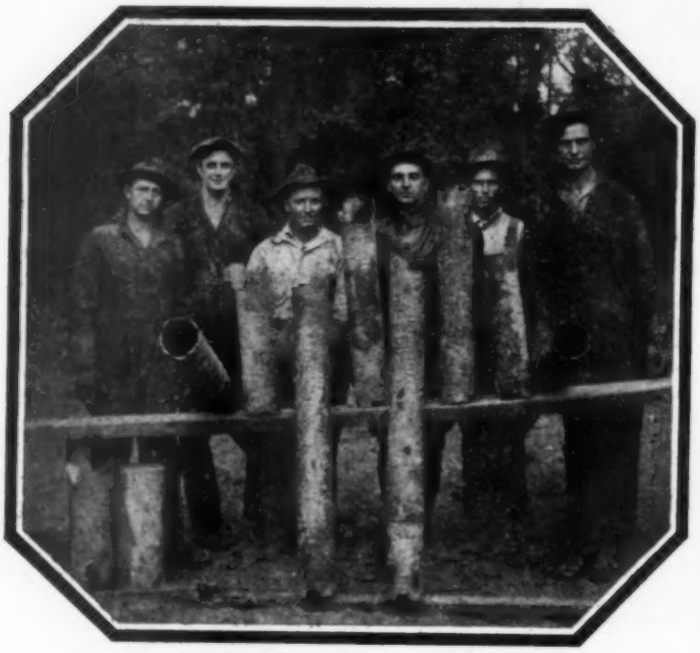
The Gaso catalogue really should be in your files. Shall we send you a copy.

GASO PUMP & BURNER MFG. CO.
Tulsa, Okla.

GASO PUMPS
for every oil industry need

Say you saw it in The Oil Weekly

"Luffing" on liners stuck in three wells; pulls in all derricks except one—a MOORE



Crew of Bodcaw No. 4 with the eight pieces of broken liner

Liner parted eight times; no damage to Moore Derrick

THE strength of the tubular leg section, weight for weight, used in Moore derricks, is nearly double that of any other section used for derrick legs. When such a derrick in addition is reinforced by a set of "relegs" consisting of plain 4-inch pipe (used drill pipe may be used) attached by means of Moore special fittings, the strength of the derrick is doubled and tripled. The stresses possible in the case described here, are estimated at about 428,000 lbs. or more. No wood derrick can be safely depended on to stand such stresses. But a light Moore Derrick with 3" 7.57-lb legs, reinforced with 4" 15-lb. "Relegs" will stand a stress of 247,850 lbs. with a factor of safety of 4, its ultimate strength being thus nearly one million pounds or 500 tons.

Catalog gives more complete information. Free for the asking.

BODCAW NO. 4 WELL SAVED

Wood Derricks Pulled in— MOORE STANDS

The Ohio Oil Company recently found it necessary to pull the $5\frac{3}{16}$" liner on their No. 4 Bodcaw Lumber Company well at Cotton Valley, Louisiana. Over this well they had an 88'3" Moore Tubular Derrick, equipped with 4" 15-lb. reinforcing legs or "relegs." Nearby the driller of two other wells undertook to do the same thing with wood derricks. J. S Hasson, General Superintendent, and M. V. Pepsaire, Drilling Superintendent for the Ohio Oil Company report that after unsuccessfully attempting to pull the liner in Bodcaw No. 4 with seven and nine lines, it was decided to "luff" it; this being the last and final remedy in rotary drilling. After stringing up a three-fall luff on seven lines, making a total of twenty-one lines, they luffed on the stuck liner for a week, with the result that the liner was pulled apart eight times but in spite of the enormous stress imposed on the Moore derrick, it stood up and suffered no harm whatever. By this method, they were finally enabled to clean the hole and complete the well as a producer.

Other Wells Doubtful

The owners of the other two wells were not so lucky. One of them, after pulling in the wood derrick three times, parted the liner below the casing, compelling the crew to side track the liner in an attempt to complete the well. The other had almost exactly the same experience. Neither hole can be cleaned, and successful completion of the wells is doubtful.

The superintendents and crews of the Bodcaw No. 4 are unstinted in their praise of the Moore derrick, giving it full credit for its strength which enabled them successfully to work out of their difficulties.

Lee C. Moore & Company, Inc.

PITTSBURGH, PA.
ESTABLISHED 1907

CASPER, WYO. *Midwest Building*
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SHREVEPORT, LA. *824 Prospect Avenue*
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California Representatives—BUCK & STODDARD
SAN FRANCISCO—*485 California Street*
LOS ANGELES—*3354 E. Slauson Avenue, Box 720 Arcade Station*

MOORE TUBULAR STEEL DERRICKS

BYERS PIPE

GENUINE WROUGHT IRON

—and now *for* Better Tubing

CORROSION and crystallization are the two arch enemies of tubing. Tubing failures are costing operators millions of dollars annually. Every operator readily recognizes the fact that any reasonable price paid in order to get longer lasting tubing is a good investment. Railroad companies from long experience in operation of rolling stock have found that no metal resists rust and constant vibration so long and so successfully as genuine wrought iron. Observant oil operators are gradually finding the same to be true as regards wrought iron tubing.

The fibrous metal of Byers wrought iron resembles a wire cable in toughness. Its incorporation of siliceous slag protects it against rust and crystallization. This slag incorporation is entirely absent in ordinary "wrought" pipe. Byers tubing is guaranteed to be made of genuine wrought iron, of the highest quality.

Ask for further information

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Established 1864

Representatives:

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Distributors in all Jobbing Centers

Tubing • Casing • Drill Pipe • Line Pipe

LUCEY
Steam Duplex Slush Pumps

There is nothing so pleasing to the eye of an engineer as a well-proportioned, well-balanced slush pump.

There is no sweeter sound to his ears than the steady "Chug-Chug-Chug" of that pump in action.

Now—observe for a moment the LUCEY Steam Slush Pump.

It has that nicety of design, that accurate blending of line and weight, which betokens the perfect balanced pump.

Every ounce of power in its sturdy body is as easily controlled as a mild-mannered, well-broken racing pony.

Service is what you want and expect in a slush pump—then specify LUCEY Steam Slush Pump.

Our bulletin No. 104 gives all details.

THE NA
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Wherever there's Oil

THE NAME IS A LUCEY GUARANTEE

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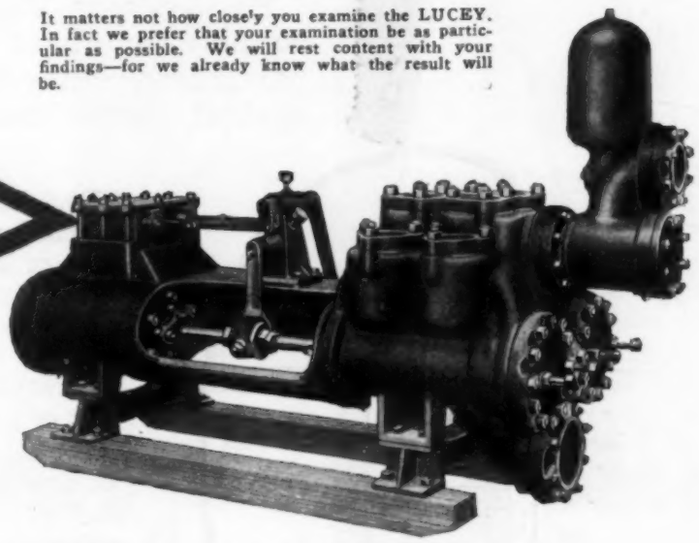
CORPO

Wherever there's Oil

THE NAME IS A LUCEY GUARANTEE

Check it part by part with any pump

It matters not how closely you examine the LUCEY. In fact we prefer that your examination be as particular as possible. We will rest content with your findings—for we already know what the result will be.



A short description of the LUCEY Slush Pump would read like this:

Steam cylinders are made of close-grained gray iron and are designed and tested for working pressures up to 150 pounds. The steam chest for both cylinders is of one piece construction and is bolted through the cover to the cylinders. Valve stems have double guides, assuring perfect alignment. All working parts are carefully machined and tested at all points of contact to insure the greatest accuracy and strength.

ME IS A
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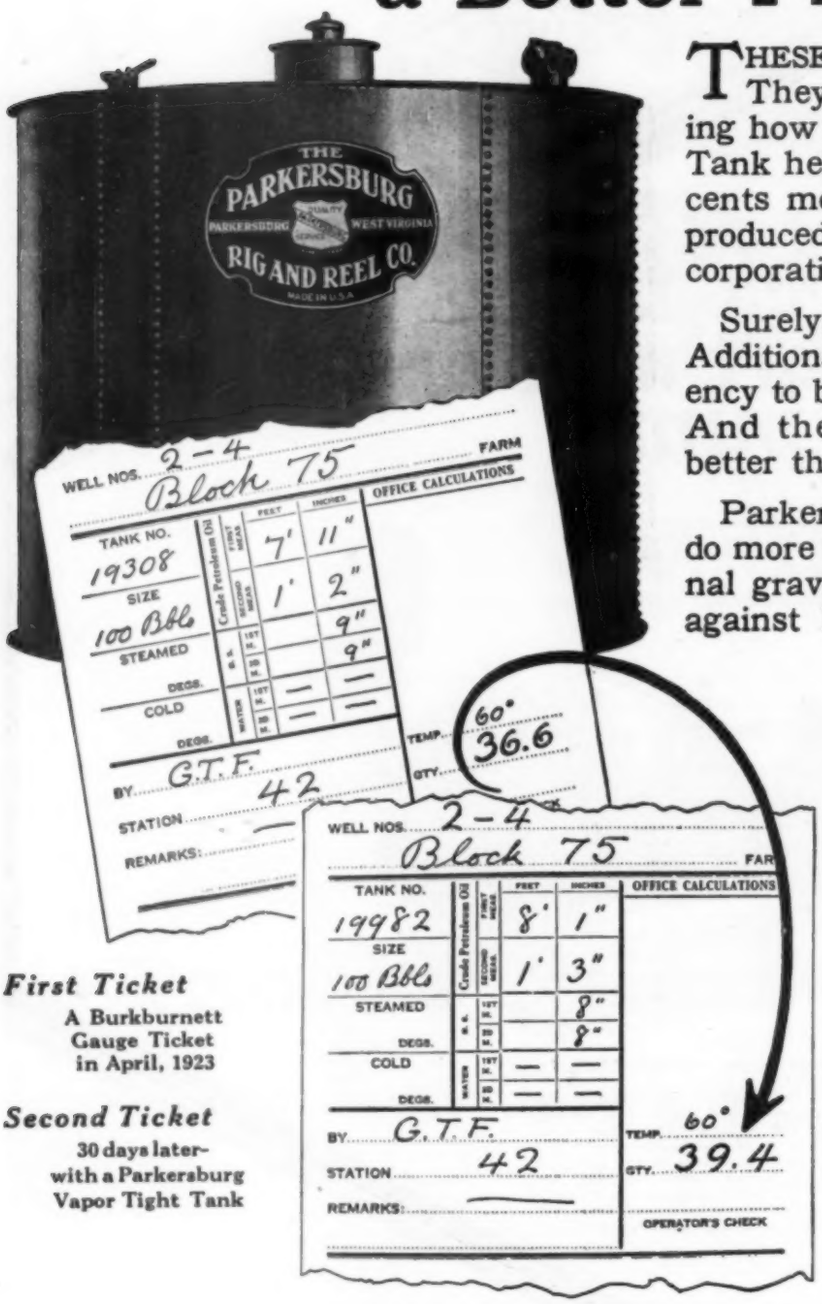
Main Office and Works

CHATTANOOGA TENNESSEE

Export Office: Woolworth Bldg., New York

A Better Tank *and* a Better Price for Oil



First Ticket
A Burkburnett Gauge Ticket in April, 1923

Second Ticket
30 days later—with a Parkersburg Vapor Tight Tank

THESE gauge tickets tell the story. They are a definite record showing how a Parkersburg Vapor Tight Tank held up gravity and brought 40 cents more per barrel for the crude produced by this nationally known corporation. (name on request)

Surely, here is a worthwhile saving. Additional profits because of the tendency to buy crude on a *gravity* basis. And the higher the gravity—the better the *price*.

Parkersburg Vapor Tight Tanks do more than hold crude to its original gravity—they hold every barrel against losses through evaporation.

PARKERSBURG Service includes complete installations of Tanks and Equipment for retaining gas with crude at pressures consistent with customers' requirements, or for separation of gas for manufacture of gasoline or use as fuel.

Parkersburg Vapor Tight Equipment can be applied to any steel tank of any capacity although best results are obtained when this equipment is used with Parkersburg Bolted Steel Tanks.

Ask our representatives how Parkersburg Vapor Tight Equipment does this. Or write for information.

The PARKERSBURG RIG & REEL COMPANY

Main Office and Works, Parkersburg, W. Va. ***New York Office,*** 30 Church St.

California Representatives, BUCK & STODDARD
485 California St., San Francisco, Calif.; Box 720, Arcade Station, Los Angeles, Calif.

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Breckenridge
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WYOMING
*Casper
‡Rawlins

LOUISIANA
*Shreveport
Haynesville

KANSAS
*Eldorado
Madison

WEST VIRGINIA
Parkersburg
Clarksburg

OKLAHOMA
*Tulsa
Bristow
Drumright
Holdenville
Hominy
Okmulgee
Wetumka
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Wilson
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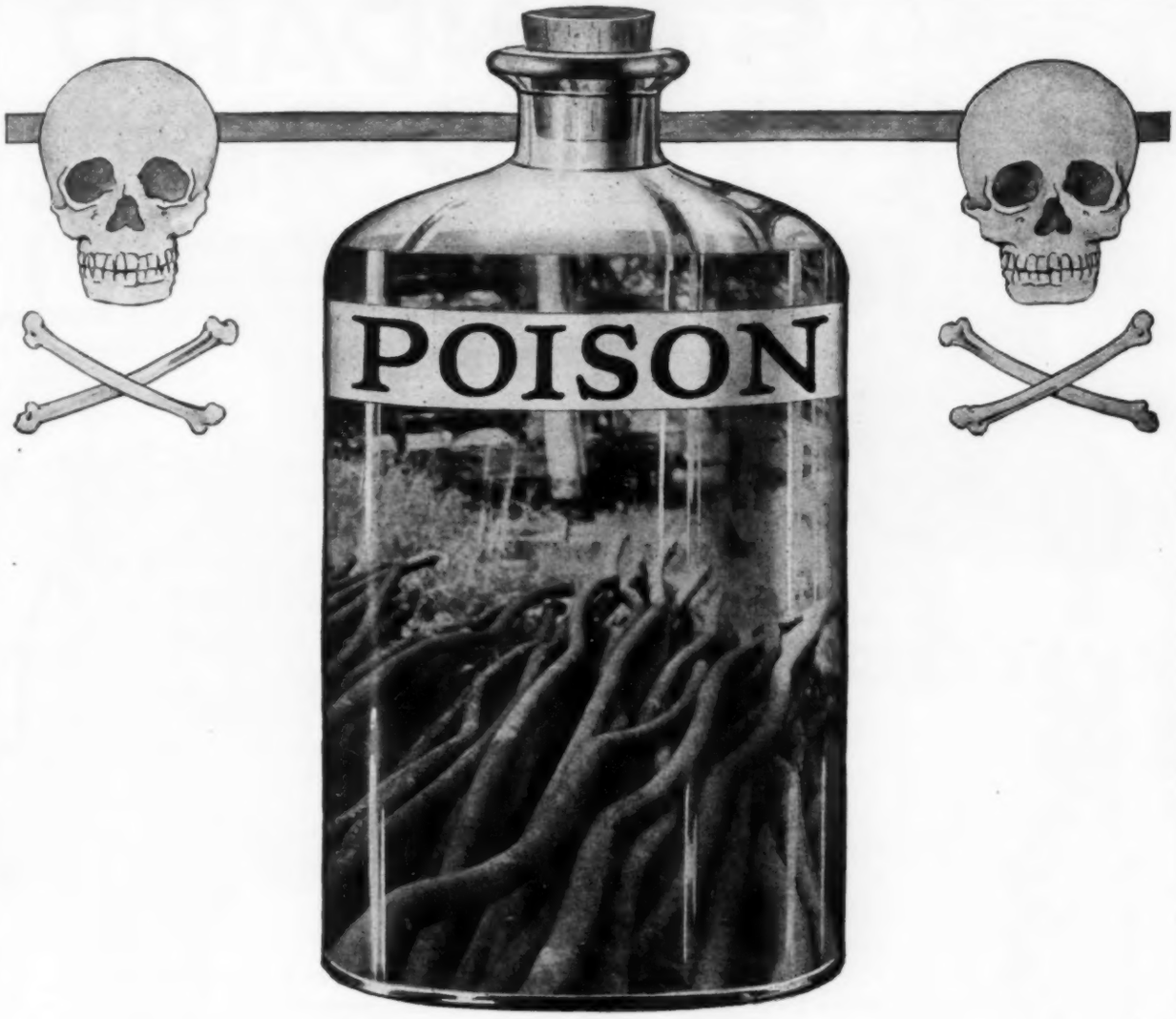
Stroud
Wewoka

ARKANSAS
*El Dorado
Louann
Smackover
McNeil

MONTANA
Sunburst
†Winnett

*District Offices ‡Frick-Reid Supply Co. †Continental Supply Co.

Say you saw it in The Oil Weekly



Name Your Poison!

If asked to take this phrase seriously, is there any Producer who wouldn't answer, "Tubing Accidents"? Is there anything in production experience that takes more joy out of life or administers more grief to the bank roll?

Loss averages 1 to 20 thousand dollars per accident. GUIBERSON Tubing Catchers, spelling positive protection, cost only $90 to $150 per well. Every month additional companies adopt the policy of placing these catchers "on every pumping well". Better be safe than sorry!

THE GUIBERSON CORPORATION

Box 1106, Dallas, Texas

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CALIFORNIA BRANCH: 1737 E. 7th St., Los Angeles
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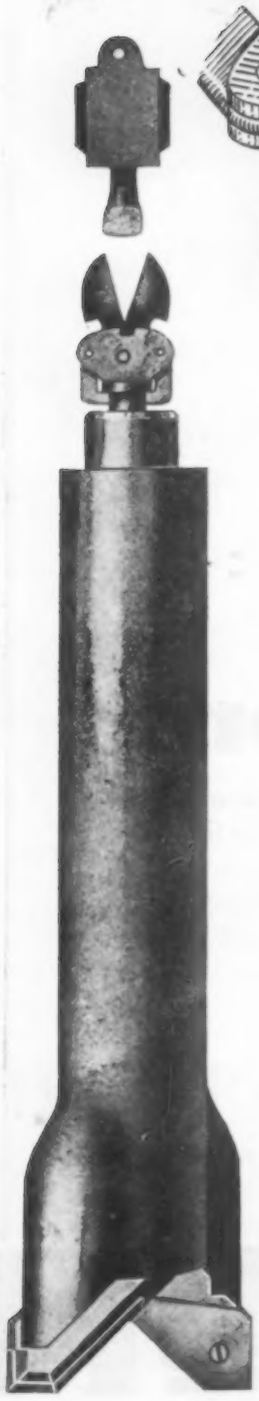
NEWARK, O.

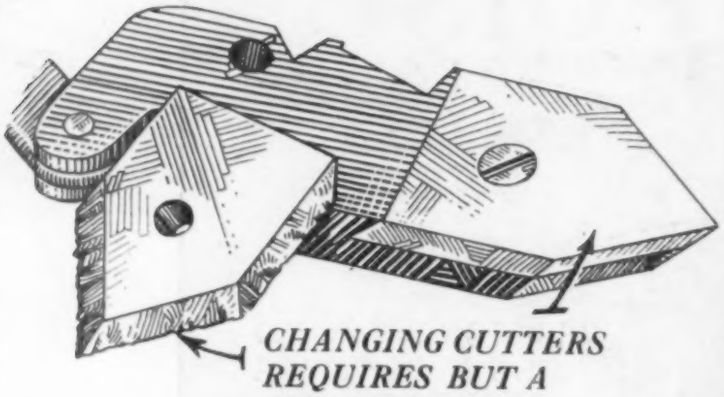
GUIBERSON

BETTER BE SAFE THAN SORRY

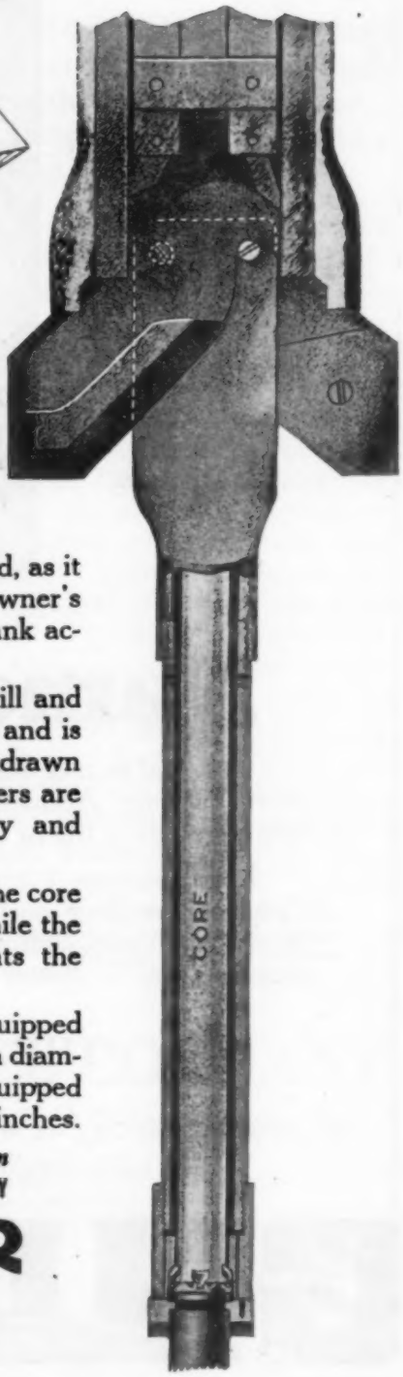
Say you saw it in The Oil Weekly

The STANDARD COLLAPSIBLE ROTARY DRILL





CHANGING CUTTERS REQUIRES BUT A FEW MINUTES



Descends inside the drill stem and expands to required diameter at bottom of the collar. It is quickly collapsed and withdrawn to surface for change of cutters, without removing drill stem.

It is the driller's and roughneck's friend, as it saves them much labor, and is the well owner's protection against rapid depletion of his bank account.

The Core Barrel is attached to the drill and descends like the drill inside the drill stem and is revolved by the drill stem collar. It is withdrawn in the same manner as the drill. The cutters are removable and when dull can be easily and quickly replaced.

The drill stem can be revolved while the core barrel is descending and ascending, and while the cutters are being changed, which prevents the slightest danger of "freezing".

Drills for 4 inch drills stems can be equipped to cut any size hole from 6¼ to 11 inches in diameter. Drills for six inch drill stem can be equipped to cut holes any diameter from 12 to 18 inches.

Write for folder containing full information

INVENTED, PATENTED AND MANUFACTURED BY

O. M. CARTER

W. T. HILTPOLD, SALES AGENT
206-7-8 SCANLAN BLDG.
HOUSTON, TEXAS

Say you saw it in The Oil Weekly

by the drillers of every field

Burns Tubular Temper Screw

Sold by all supply stores

Manufactured by

BURNS TOOL CO.

OKMULGEE • • • • • • • • **OKLAHOMA**

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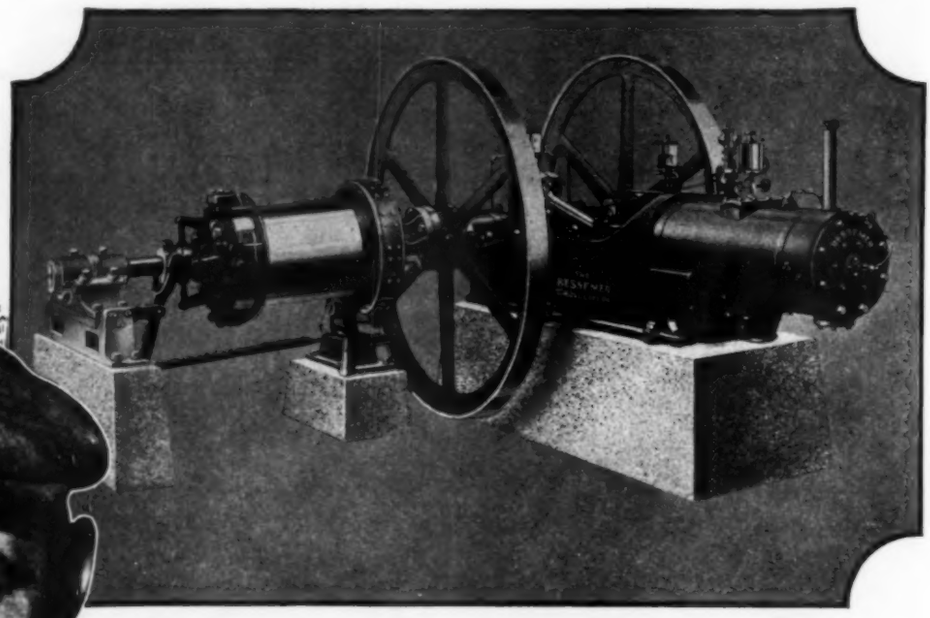

"Nearest Fool-Proof"—

IN describing his Bessemers, the chief engineer of a Texas plant, experienced with all kinds of engines, stated that Bessemers are "the nearest fool-proof of any engines I have ever seen."

Their simplicity and sturdiness permit a degree of continuous, trouble-free service impossible to obtain with other equipment.

The longer running time, the lower upkeep cost of Bessemers will pay you added profits on *your* leases and give you the same fool-proof, year after year service they are giving thousands of other users in all of the country's oil fields.

Write for complete information covering the equipment you require.

Oil Field Engines
8 to 15 H. P.

Commercial Gas Engines
15 to 165 H. P.

Oil Engines
Semi-Diesel 25 to 180 H. P.
Full Diesel 50 to 1000 H. P.

Compressors
Direct Gas Engine Driven, Belt Driven, Single Stage and Two Stage.

Vacuum Pumps

Roller Pumping Powers

THE BESSEMER GAS ENGINE COMPANY
62 York Street ∴ ∴ Grove City, Pa.

BESSEMER

BESSEMER OIL FIELD ENGINES — COMPRESSORS VACUUM PUMPS — ROLLER PUMPING POWERS

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7 Reasons

Why CRAIN SECTIONAL (Portable) HOUSES Provide Better Industrial Housing at Lower Cost

LOW FIRST COST

because produced on a large scale in standardized, intechangeable units.

LOWER ERECTION COST

Their erection is simply a matter of assembling ready-constructed panels, and can be done quickly by unskilled labor.

STURDY CONSTRUCTION

of best grade material, insures longer life, and unusual weatherproof qualities.

GOOD APPEARANCE

Crain Sectional Houses are designed by competent architects and are correctly proportioned. The residence buildings are real homes.

SAVE TIME

Crain "Overnight" service saves time in securing materials. Sectional construction saves time in erection.

REDUCE INVENTORIES

Crain Sectional Houses are shipped from stock on receipt of order; eliminating the necessity of your carrying large stocks of building materials.

REDUCE SALVAGE LOSSES

They can be quickly knocked down, moved, and re-erected on the next job, thus yielding practically full salvage value.

Write for Catalog of Plans and Prices

CRAIN READY-CUT HOUSE CO.

Crain Sectional Houses (Portable) For Industrial Purposes

HOUSTON, TEXAS

Crain Ready-Cut Houses (Not Portable) For Permanent Homes

THE LAYNE

Setting Tool for all types of Ratchet Packers

24 HOUR SERVICE

Top View Special Heavy Back Pressure Valve

Bottom View Special Heavy Back Pressure Valve

Cone Shaped Screw Wash Ring

7 DAYS IN THE WEEK

Lead Cone and Canvas Ratchet Packer

Lead and Canvas "Double Seal" Ratchet Packer

Keystone Wire Wrapped Screen

The Layne & Bowler Co.

HOUSTON, TEXAS

"WESTERN" SUPER-POWER *for every power need in the* Petroleum Industry

Throughout the length and breadth of the power world, the name "Western" is synonymous with efficient, dependable, power. This efficient, economical, dependable operation is a built-in feature—an intergral part of every "Western" Engine—dominating throughout design and construction from the drawing board to the finished product.

There is a size and type of "Western" Engine especially adapted to every power need in the petroleum industry, where thousands of horsepower operating in all branches of service for more than a quarter of a century are responsible for the fact that

"A Single 'Western' Engine Frequently Has Changed The Complete Power Policy Of An Entire Company."

Western Machinery Company

General Offices & Factory: 905 North Main Street
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Tulsa San Francisco Okmulgee

Efficient Dependable POWER

"Campaign Promises"

Over 31 years ago The S. M. Jones Company set out to make the best Sucker Rod and promised itself that it would never permit the quality of the product to fall below that high standard. This wasn't a "Campaign Promise". It has been made good each succeeding year and to-day Jones leads the world in quality and production.

Jones forged-end Sucker Rods

are the strongest, most dependable Sucker Rods made—exhaustive, unbiased, tests prove it conclusively.

Read our book—"The Inside Story"—get all the facts—a copy is yours for the asking.

The S. M. JONES Co. Toledo, Ohio.

Mid-Continent Office: 601 Wright Bldg., Tulsa, Okla.

Say you saw it in The Oil Weekly

A Gate Valve That's Tight—
Easily Operated and Long Wearing

Darling Gate Valves are playing an important part in the production of oil. Their year-in and year-out dependability—their ease of operation—and their never failing ability to stay tight, all these qualities are well appreciated by men in the oil fields who are anxious to produce oil economically and to show the greatest possible returns on the investment in equipment.

Men who use Darling Valves say that their efficiency reduces losses in production to a minimum. They seldom need replacement—they last for years. Back of this superior performance are the years of skillful engineering—of untiring experimenting—and of exacting workmanship with the best materials.

These well known Darling qualities stand out uniformly because Darling tests EVERY valve before it leaves the plant. Others are realizing a big saving by using the right kind of valve—you can do it, too.

Let us send you diagrams showing details of construction. Sent upon request together with catalogue.

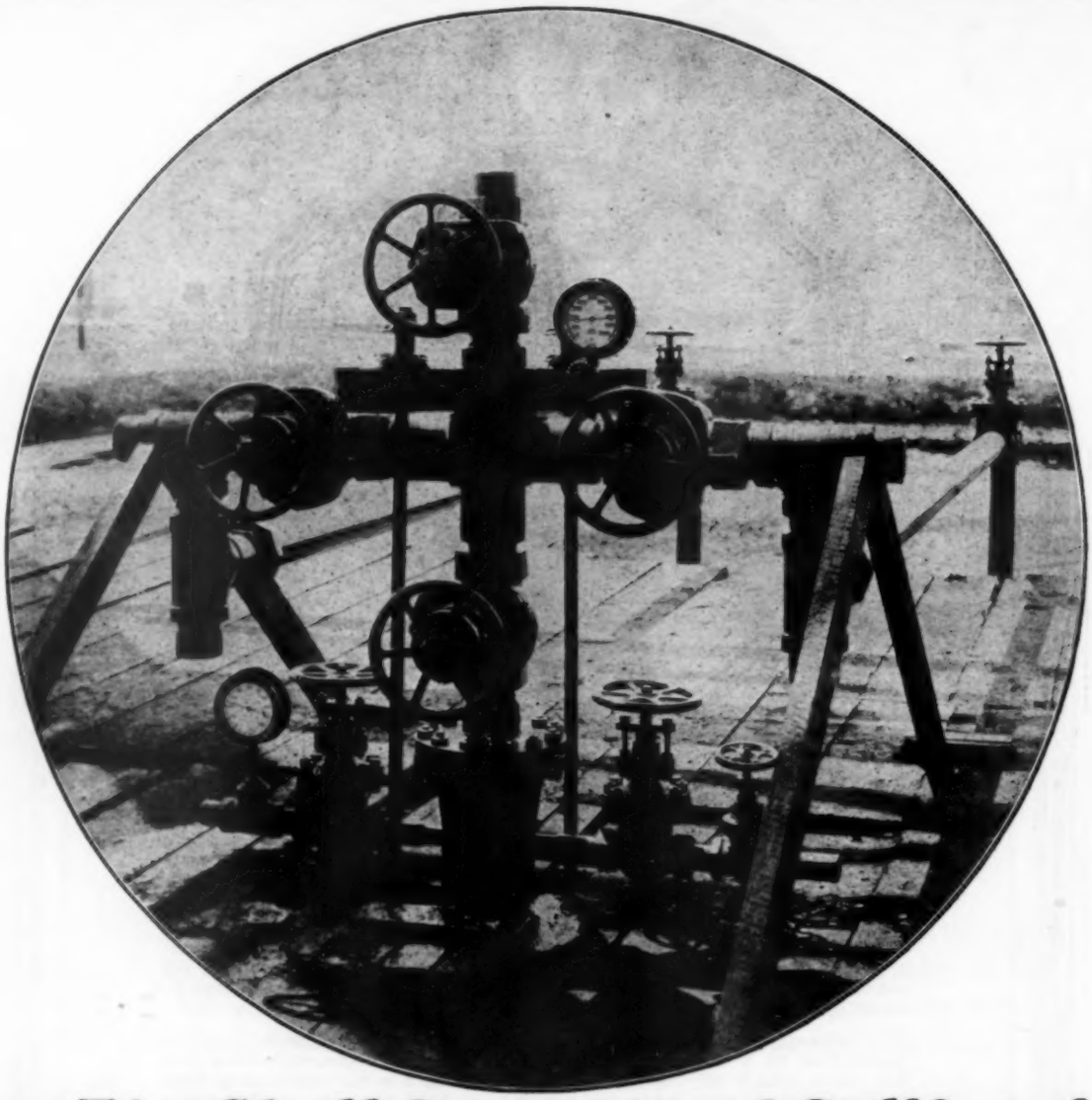
DARLING VALVE & MANUFACTURING COMPANY

Williamsport, Pa.

New York Chicago

Oklahoma City Houston

DARLING
GATE VALVES



For The Shell Company of California

The Kerotest setting pictured above shows the standard setting adopted by the Shell Company and used exclusively at Dominguez except where "Deer Horn" settings are installed.

Two 2-M Kerotest Valves are used on the head; three 4-H valves on the arms; one 5-M or 4-M Valve is used on the casing at the top of the head; and 3-H Valves are used on the distributing lines.

The Shell Company is but one of a number of progressive companies who have learned from experience that the KEROTEST line of Valves and Fittings will function efficiently and smoothly under the most severe operating conditions.

Let us send you the facts.

Pittsburgh Reinforced Brazing & Machine Company

Pittsburgh, Penna.

Carried in stock and sold by

GRINNELL COMPANY OF THE PACIFIC
Los Angeles San Francisco

NORVELL-WILDER HARDWARE COMPANY
Houston Beaumont Shreveport

OIL WELL SUPPLY COMPANY
Oklahoma Kansas Colorado Wyoming

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OIL WELL SUPPLY COMPANY
Pittsburgh New York Tampico London

Valves KEROTEST **Fittings**

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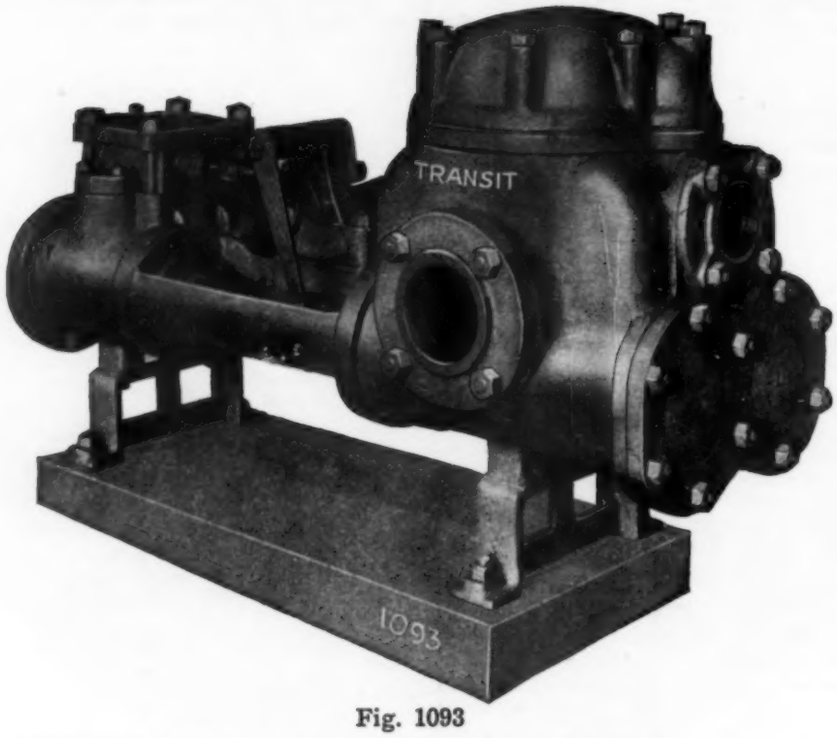

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Premiums Indicate Possible Further Advances

Distinctly a seller's market for crude oil and movement of refined oils is showing improvement

FORECASTING further upward revisions in the crude price schedules of the principal purchasing agencies throughout the country east of the Rocky Mountain area, independent refining interests have increased premiums so that their quotations are still above those announced last week end when advances were posted in all principal fields excepting California, where the price level remains unchanged.

In the Appalachian region and in the Mid-Continent field independent buyers of crude have met the latest price advances with substantial bounties, in some instances ranging as high as 35 to 50 cents, depending on the gravity of the oil. In the Rocky Mountain region premium paying is largely restricted to those areas where are located small independent refineries, who now, as in the past, are compelled to offer a price attraction for oil in order to obtain anything like a sufficient quantity with which to operate. This is especially true in the Northern Mountain fields in the Kevin-Sunburst area.

In Oklahoma the Marland Refining Company, Champlain Refining Company, Bolene Refining Company, Shaffer Oil and Refining Company and other independent purchasers have revised their schedules upward in line with the Prairie and Sinclair advances of January 30. Marland topped the $2 mark for its highest grade, that of 41.6 gravity, and above. Shaffer has posted a high price of $1.95 for 41 gravity and above on oil it purchases, while Champlain Refining met the new advances on Garber and Tonkawa crude, posting prices of $1.85 and $2.20, respectively. Sinclair Oil and Gas Company had previously advanced Garber oil to $2.20 for 48 gravity and Tonkawa to $1.85 for 41.6 and above. Tonkawa Petroleum Corporation (Constantine interests) has announced a price of $1.95 for Tonkawa oil. This company operates a small refinery in the Tonkawa field proper. Sinclair Crude Oil Purchasing Company in meeting the advance announced by the Prairie retained its previous grading of 39 to 41.5 degrees and 41.6 and above.

With the latest increases independent producers in the Mid-Continent were expected to turn loose considerable quantities of stored crude that has been accumulating for several months, but a late check does not bear this out in every instance. In the Cromwell pool in Seminole County, Oklahoma, tankage of Superior Oil, Amerada Petroleum, Tidal, Osage and others are reported full and in this same area stored crude of the Carter also is tank capacity. In other fields Pennok, Slick and others still are holding on to much of their stocks and it is believed that until further advances are posted this oil will not be put on the market in any considerable quantity. Phillips Petroleum Company is another company that has accumulated large crude stocks, but this company recently negotiated new contracts for long time deliveries to Atlantic seaboard refiners and it is understood that this arrangement now will take care of

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The OIL WEEKLY wants only such subscribers as are engaged in the oil producing or pipe line business, or sub-branches of the producing and pipe line business. It has no desire for investor circulation, and it reserves the right and will exercise the right to reject subscriptions coming from persons whose interest in the oil industry is through the purchase of oil stock.

R. L. DUDLEY, Publisher.

Question Need of Oil Conservation Board

Institute directors decide that there is no "waste and over-production" and begins own survey

By Clarence L. Linz
Staff Representative

Washington, D. C., Feb. 3.—Official Washington is wondering what the Federal Oil Conservation Board will be able to do toward solving the oil problem if the American Petroleum Institute refuses to co-operate with the government agency, an intimation of which is seen in its notification to the board that it has appointed a committee to make an exhaustive investigation into the actual conditions surrounding petroleum production and distribution. The institute further is understood to have advised the board that it does not consider it to be an established fact that the twin evils of waste and overproduction exist in the oil industry.

Following the recent meeting in Atlantic City, officials of the American Petrolium Institute came to Washington to confer with members of the Oil Conservation Board. The report of the Atlantic City proceedings shows the institute to have been prepared to co-operate with the government, but after the conference in Washington the directors of the institute met in New York, where they are understood to have reached the conclusion that waste and overproduction, claimed by the board to be the underlying causes of the present situation, did not exist, although it was said the institute would make an investigation into actual conditions.

General Counsel for the Federal Oil Conservation Board. Charles W. Waterman of Denver, Colorado who has been chosen by the President to handle the legal end of the Conservation Board work. He will make offices in Washington.
—International Newsreel Photo.

Members of the Oil Conservation Board are said to be very disappointed over the attitude adopted by the institute. Their statements as to waste and overproduction were based upon figures submitted by the industry itself, under the law requiring monthly production reports, and they do not understand why the industry should desire to make an independent investigation of the question before deciding to cooperate with the government.

If waste and overproduction do not exist in the oil industry the government board is left without a basis of operation. Its tentative program has been worked out on the assumption that there is excessive waste in oil production, on the one hand, and that there are periods of great overproduction on the other, leaving the industry teetering between feast and famine. To take away waste and overproduction would be practically to take away the reason for the board's existence, since the problems of dealing with the government oil reserves could readily be worked out by other existing agencies.

That the oil industry is not unanimous in its opinions either as to the necessity for the new board or the methods of remedy to be adopted, to say nothing of the future of the oil industry in this country, is indicated by the reports which are coming to Washington in response to the questionnaires sent out by the board.

Some of these answers are understood to show a feeling that the government should refrain from further regulation, while others assert that government control is essential if the country is not soon to face a serious oil shortage. Several operators have taken the opportunity to call attention to the control of many activities exercised by the Standard companies, with the suggestion that this phase might well be investigated. Still others adopt the view of the board that waste and overproduction are serious factors in the situation, with some suggestions that the government discontinue the exploitation of its reserves, on the ground that it might be cheaper in the long run to purchase privately produced oil than to work the reserves with the attendant waste.

While some replies attack the Standard companies, and even go so far as to intimate that Standard was behind the creation of the board with a view to securing regulation which would reduce production to a point where price manipulation would be easier, others defend the companies and declare that independent concerns which are willing to play fair with Standard officials are treated very well.

Suggestions so far received are understood to include recommendations that the states enforce their conservation laws or enact legislation dealing with the question; control of stock promotion and speculation; control of drilling; some rate-fixing control over pipe lines, similar to that exercised by the Interstate Commerce Commission over railroad rates, and tne adoption of requirements that producers dispose of oil within a reasonable time after it is put in storage, so as to prevent evaporation, and that the price of oil should represent its gravity, taking into account naphtha evaporation during storage.

On the basis of developments so far it is intimated that the Federal Oil Conservation Board now has all the ingredients for a fine row with the industry. However, the members of the board are neither radical nor unfriendly to the industry, and will move cautiously, making every effort to avert precipitating any disagreement. The members of the board are all familiar with the situation; the secretary of the navy has administration over the naval oil reserves, together with the secretary of the interior, in whose department also much work of value to the oil industry is being carried on, while Secretary Hoover, as head of the department of commerce, has familiarized himself with the marketing situation in oil as in other commodities, and, furthermore, is an ardent advocate of what he terms the "long view," by which he means attempting to visualize what the eventual effect of an action will be rather than its immediate result.

Work Would Stop Forced Leasing of Indian Lands

Washington, D. C., Feb. 2.—Legislation for conservation of Osage Indian oil lands was today sought of congress by Secretary of the Interior Work, who asks for the enactment of measures permitting suspension of leasing for a period of two years and authorizing the department to reduce the area to be offered annually for lease whenever such action is deemed necessary because of overproduction or inadequate prices.

Pointing out that the law now requires that 100,000 acres of land in the Osage reservation must be offered for lease annually, Secretary Work declares that "forced development is equally disadvantageous to the Indians, the oil producers and the oil industry.

Efficient Utilization Is Conservation Feature

Increase in returns from crude oil to be followed by more economy in use of gasoline

By Grady Triplett
Staff Representative

IF the nation's financial district is a true index of conditions, executives of the oil industry are bent on striving to have the newly created Federal Oil Conservation Board bring about a type of conservation not commonly associated with that word.

Public expressions are not numerous concerning the board. The words spoken of it, of course, are favorable. But men are reserving their expressions until they know more of what lines the board is bent on following.

Past expressions from the majority of men of prominence in the petroleum industry is against governmental control or supervision of the privately owned oil reserves of the nation. Right now no man can be found willing to reiterate these past expressions, although it is safe to conclude that these men are not friendly to any turn that may hint at governmental supervision. Should the Federal Oil Conservation Board undertake investigations, leading toward supervision, it is certain that these men would be unfriendly to the move.

But these men are not unfriendly to efforts, which may lead to a type of conservation that is somewhat different from older interpretation and which may prove of far more value to the industry and to the public in general. This sort of conservation may be classed as that leading to practices which will result in gaining greater energy from each barrel of crude oil produced.

Manufacturing Changes

The past few years have witnessed a revolution in manufacturing within the petroleum industry. Executives and scientific men believe that more economical manufacture has hardly begun within the industry.

As the leaders of the petroleum world appear before the Federal Oil Conservation Board they are sure to give its members insight of these changes and ask that the offices of the federal government be brought to work to hasten the day when the products from each barrel of crude oil can be converted into several times the amount of energy that now results from their burning.

While the men, who will appear before the board, are reserving their expressions for the proper time, it is safe to say that they will put themselves on record as being in favor of any assistance the agencies of the government can lend toward bringing about more economical production, manufacture and use of petroleum.

The President's Federal Oil Conservation Board confers. From left to right are shown Secretary of War, Weeks; Secretary of the Navy, Wilbur; Secretary Work; Secretary Hoover and E. S. Rochester, Secretary of the Board in meeting at the Department of the Interior at which the President urged more stringent steps for preserving the future oil supply of the Nation as an assurance of National Safety.

—International Newsreel Photo.

A phase of the situation not commonly associated with the oil industry is that of the equipment in which petroleum products, especially gasoline is consumed. Automobile engineers say they can design motors, which will result in a saving of as high as 80 per cent on gasoline.

It may not come within the province of the Federal Oil Conservation Board to consider these facts but its members are sure to hear something of it from the men who are invited to give their opinions. The leaders of the petroleum world know their business can be conducted on more economical lines and they know they are striving to bring about this improvement. But many of them believe more gasoline is being wasted in high-powered automobile engines than is being wasted through improper production or antiquated types of manufacture.

In a speech recently before the New York Bond Club, at its monthly meeting, Amos L. Beaty, president of the Texas Company expressed the opinion that in 10 years gasoline would be made to run an engine 40 to 50 miles on a gallon of gasoline, through the adoption of new motor construction.

Mr. Beaty also touched upon the attitude the oil industry holds toward the Federal Oil Conservation Board. He spoke of it as "the most commendable step taken in connection with the oil industry in many years."

"It seems to me," he continued, "that the greatest encouragement we have and one of the things that will appeal to those on the government board who study the question, and those in the industry who have studied it, is a kind of conservation that has been little talked of, and perhaps some of you have little thought of. We usually think of conservation as a setting aside of land. One thought is the creation of government reserves, and in passing I will say that that does not mean naval reserves.

"The real conservation that is going on is the higher uses of the product; the improvements in the processes. Take for instance this matter of gasoline. In the last five years the processes of manufacture have developed to such a point that out of the same quantity of crude, we get 25 to 30 per cent more gasoline than we could have gotten five years ago."

The Magnolia Petroleum Company's field camp and warehouse near the Breckenridge field in

January Production Same as Previous Month

Large increase in Texas offset by losses in other sections so that gain is negligible

IN spite of a 2,200,000-barrel gain in the output of Texas during January total production of the United States gained only 143,670 barrels over December. The combined production of all fields totaled 61,023,171 barrels, against 60,879,499 barrels for the last month in 1924.

Advances in crude postings came just at the close of the month and were too late to have any influence in stimulating field work. The Wortham field in Texas was responsible for the increase, notwithstanding that this field reached its peak at the middle of the month.

Although Texas gained 2,200,000 barrels, this was directly offset by a loss of 1,400,000 barrels in Oklahoma plus a 400,000-barrel drop in Mountain States and a slump of 300,000 barrels from Arkansas. California production was boosted 100,000 barrels, but Louisiana lost an equal amount. Eastern States were steady in their output, but Kansas was up 58,000 barrels.

Outside of the Wortham area there was no increase in Texas fields. In the Wichita section and throughout the Central-West division crude production suffered losses. Extreme cold weather in the early part of the month handicapped drilling in all fields. A minimum of completions was reported from fields in the southern district and along the coast, as well as from Luling.

Efforts to extend the Big Lake structure were fruitless.

Wortham production was at its maximum on January 15 and has been declining steadily since. It is estimated that there are not more then 100 locations yet to be drilled and these are not being counted upon to show much flush production.

Wildcatting in the coastal plain resulted in a number of dry holes, but no discoveries of significance.

As shown by drilling statistics, California completed five less well during January than in December, but initial production during the former month was 20,000 barrels more than for the one just ended. Torrance leads in field work. Old Los Angeles Basin fields are quiet with very little new work in sight.

Drilling throughout the Mountain States is practically at a standstill, indicated by the fact that only 13 wells were finished last month. Cold weather is responsible for the widespread shut-down, and also accounts for a loss of slightly more than 400,000 barrels in crude output.

Many wells were shut down for considerabe time in Oklahoma during January and unfavorable weather is given as the cause for the big decline in production. Cromwell lost about 300,000 barrels and similar amounts were reported from a few other fields. The Gilcrease-Papoose pool was the only one to show a gain for the month.

Cowley County fields in Kansas combined to furnish a boost of 58,000 barrels over last month.

Smackover was the only district in Arkansas where there was much drilling, but initial production from this field was far insufficient to offset the decline and the state total suffered.

In Louisiana Cotton Valley had a few additions to its list of producers. No important extensions were made, however, and initial production was insignificant. Completions in other Louisiana fields were few.

As compared with last month there was an increase of 80 in completions, 49 producers, 38 failures, but seven less gas wells. Initial production doubled itself during January, jumping from 257,745 barrels to 522,900 barrels.

With Wortham showing such decreases as it is, and chances for much cold weather ahead, there is little probability of an increase in crude output during February. Recent boosts in the price of oil will undoubtedly serve as a spur to drilling, but results of any drilling programs not yet started will hardly be felt within 30 days.

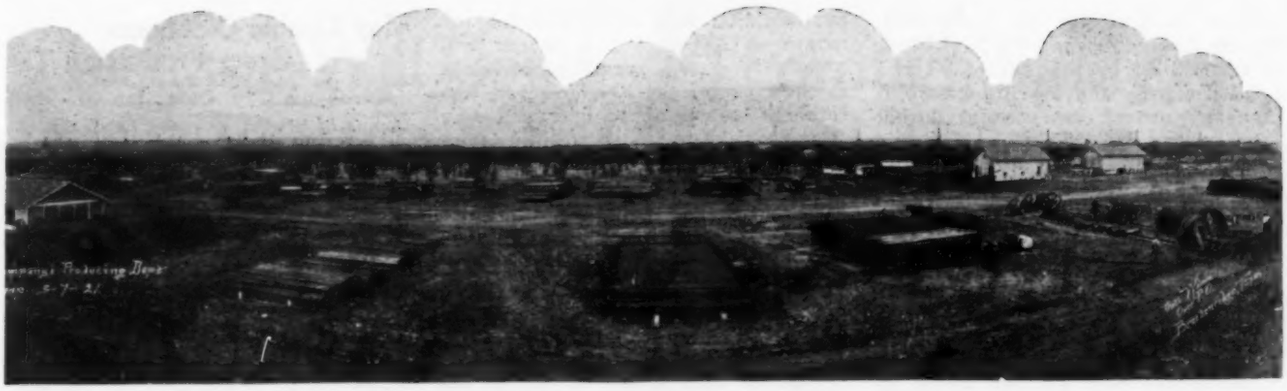
Wortham's Fall

The rise and sudden fall of Wortham's production during January commanded nationwide interest of the oil industry, and unusually heavy declines in daily output registered by wells in the Wortham field after building up a peak of 166,550 barrels on January 15 from 73 wells paved the way for important crude price advances before the close of the month. The Wortham field was generally accredited with having a potential crude yield that would weaken the hight gravity oil price structure when it broke loose with a huge development campaign late in November and throughout December, but the failure of the producing area to cover a large area when drilled up proved that the threat to the crude market was harmless. The failure of Worthem to fulfill its threat with a heavy crude yield, indirectly benefited the high gravity oil market, as exploration work was held in check in other important fields in the Mid-Continent district for nearly two months to await the outcome of Wortham. Production declines took

JANUARY U. S. PRODUCTION

Following is the gross estimated production of crude oil in the United States for the month of January as compiled by The OIL WEEKLY:

California	18,751,900
Mountain States	2,336,656
Eastern States	3,204,600
Texas	14,023 724
Oklahoma	14,948,882
Arkansas	3 275,925
Kansas	2,729,240
Louisiana	1,752,244
Totals	61,023,171
December	60,879,499



West Texas. This is one of the largest and most up-to-date camps in this part of the state.

place in other fields while Wortham's possibilities were being determined, and when Wortham's daily output slumped to about 80,000 barrels towards the close of January the Mid-Continent district crude market strengthened sufficiently to cause prices on all grades of crude to advance from 40 to 70 cents per barrel.

The Wortham structure was virtually drilled up during January, as 160 completions were recorded in the field during the month, with a combined initial flow of 331,810 barrels from 121 producing wells. The total crude yield from Wortham during January amounted to approximately 3,441,930 barrels. Wortham's daily production remained above the 100,000 barrel level for only 23 days during January. The field has been defined on all sides except to the northeast, with some chances of the producing area extending a short distance farther in this direction. It has a maximum width of about 2000 feet with an average width of about 1500 feet, and is slightly more than three miles in length. Seventy-five or 100 locations remain to be drilled on the structure, but the flush expected from these later completions will be negligible, since the gas pressure has been taken off, and water is rapidly encroaching upon the Woodbine sand pay.

Heavy production declines were registered during January from other fields near Wortham in the East Central Texas fault region—Mexia, Corsicana-Powell, Richland and Currie—owing to the field forces being needed to push the race for the flush at Wortham. This group of five fields has been developed by the same companies and individuals, with few exceptions, and when new territory is opened the field forces in the older producing areas are reduced to a skeleton to place trained men on important jobs in going after the flush production. This results in the older fields being neglected to a certain extent, thereby causing production to decline faster than if each pumping well was given its usual careful attention.

Weather Hurt

All major fields in North and Central West Texas sustained declines in crude production during January, but adverse weather conditions were directly responsible for the greater portion of this loss. Extreme cold weather during the forepart of January caused a general shutdown on drilling and pumping wells, while the scarcity of water for drilling purposes also held drilling operations in check. Additional water lines were constructed in the North Texas district towards the close of the month, thereby providing necessary water for a number of drilling rigs in proven and wildcat areas, while the general advance of crude prices in all the fields will have a stimulating effect on development work.

Archer County's total production during January remained above the million barrel mark, although completions were fewer and initial production dropped off. This county produced 1,131,095 barrels during January, and reported a total of 115 completions, with a combined initial flow of 11,760 barrels from 81 producing wells. Electra and Burkburnett fields were comparatively quiet during January, and no important field developments were recorded, while a decline in monthly production placed Burkburnett's output below the half million barrel mark for the first time since the field was developed.

Young County is beginning to build up its production due to the recent discovery and development of two semi-shallow fields in the upper part of the county. The semi-shallow pay in upper Young County is a continuation of the Archer County sand, and numerous wildcat tests are being drilled in search of a series of pools as has been discovered in recent years in Archer County. This wildcat activity has spread across into Throckmorton and Baylor counties. The South Vernon field, Wilbarger County, is being gradually extended over a wider area with producers in the shallow sands, while the county as a whole is experiencing a widespread wildcatting campaign. Shallow oil and gas sands in upper Montague County are also commanding more attention, since Prairie began purchasing and running all oil offered, while a market for some of the gas production is promised for some time in the near future by the construction of a gas line to the field.

The discovery of a new deep oil field in the northwest corner of Eastland County preceded the crude price advance, and a few more tests on adjoining leases have been contracted for, while the new crude prices will result in further exploration of the deep pay in this county and also Stephens County. Until the new crude prices were posted the revenue from oil and gas production was not sufficient to encourage drilling in these two counties to any great extent.

Further attempts to extend the pro-

PAST TWELVE MONTHS

The record for the past twelve months is an interesting study for comparison purposes, the following table giving field statistics for all states in the Union. Figures for Southern California begin in June, 1924, and those for Mountain States begin in November.

Month—	Completions	Producers	Gas wells	Failures	Initial Prod.
Feb.. 1924	1,105	798	40	267	183,204
March	1,510	948	211	351	293,772
April	1,634	1,084	187	363	280,160
May	2.431	1,605	273	553	343,531
June	1,808	1,215	193	400	182 750
July	1,637	1,087	168	382	203,875
August	2,041	1,405	196	440	316,713
September	1,503	1,029	152	322	226,716
October	1.788	1,149	221	418	255,820
November	1,436	888	205	343	203.135
December	1 624	979	269	376	257,745
January, 1925	1,704	1,028	262	414	522,901

UNITED STATES FIELD STATISTICS

Following are the completions, showing producers, gas wells, failures and initial production of crude by states for the month of January as compiled by The OIL WEEKLY:

States—	Completions	Producers	Gas Wells	Failures	Initial Prod.
California	74	69	..	5	30,490
Oklahoma	282	170	22	90	90,122
Kansas	73	32	7	34	7,861
Kentucky	108	78	8	22	1,973
Mississippi	..	..	..	..	....
Mountain States	13	10	2	1	5,185
New York	18	17	1	..	48
Ohio	163	84	53	26	1,888
Pennsylvania	156	109	32	15	506
Tennessee	..	..	..	..	....
V. Virginia	172	41	103	28	482
Louisiana	54	23	16	15	2,375
Illinois	17	6	..	11	213
Indiana	12	8	1	3	83
Arkansas	86	70	1	15	7,205
Texas	476	311	16	149	374,470
Totals	1,704	1,028	262	414	522,901

ductive limits of the Big Lake field, Reagan County, beyond the joint block of leases held by the Texon Oil and Land Company and the Big Lake Oil Company proved unsuccessful during January, and indications are that this field will remain in the control of two companies. The daily output of the field was increased above 11,000 barrels towards the close of January, and with more tests nearing the pay depth the field will probably stay above this level from now on.

Cold in Oklahoma

The severe cold weather which almost completely blanketed the state of Oklahoma during the entire month of January cost the state a total of 1,474,244 barrels of production. This is the amount the total fell under the total of the previous month.

Crude oil recovery for the month of January amounted to 14,948,882 barrels. Tonkawa led all other fields by reporting a total of 3,069,806 barrels for the 31 days of the month. Burbank was again second with a total of 1,864,308 barrels, while the Bristow district came third with a total of 1,493,115 barrels. The only pool in the entire state to show a gain over the month of December was the Gilcrease-Papoose, which turned in a total of 1,000,029 barrels for January as compared to the December total of 957,249, barrels.

The greatest loss of any one field was that of Cromwell, which decreased from a total of 1,429,007 barrels for December to a total of 1,057,627 for January, a loss of almost 300,000 barrels. Both the Tonkawa and Burbank pools also record a large decrease, brought about by the shutting down of 11 deep sand wells in the former field, while a scarcity of operations in the Burbank is responsible for the decline there.

Kay County led all others in reporting the number of completed wells during the month of January, a total of 42. Of this total 36 were producers and six were dry holes. The initial production of these 36 producers was 51,802 barrels, brought up somewhat by the completion of the deep sand wells in the Tonkawa field. By reporting a total of 35 completions, Seminole County took second place. There were 26 producing wells completed in this county during the month with the initial production 9293 barrels.

Oklahoma shows a total of 288 completed wells for the month of January. Of this number 170 were producers, 22 were gas wells and 90 were dry holes. The 170 producers netted a total of 90,122 barrels of initial production. This report of field activity is slightly under the report of the month previous when the state reported 293 completions, 175 of which were producers, 28 gas wells, 90 dry holes and an initial production of 108,136 barrels.

With the announcement of the Prairie Oil and Gas Company and other major purchasing factors that a higher price of crude would now prevail, it is possible that field operations for the month of February and March will greatly increase. Weather conditions at the close of January, however, was rather discouraging to operators who were planning to launch a drilling campaign.

The state of Kansas showed an increase in the total number of barrels produced during the past month when its production was recorded as 2,729,240 barrels, according to the current issue of The OIL WEEKLY. This is an increase of 58,889 barrels over the previous month.

This increase is due largely to the Cowley County fields. The Rainbow Bend field showing an increase of 68,458 barrels, while Winfield, Slick-Carson and Graham fields aided the miscellaneous report greatly with its increase of 27,383 barrels.

Greenwood County continues to lead the state fields with a report of 687,549 barrels, a slight increase. Its runner-up showed a large decrease when Eldorado district reported 504,525 barrels. Rainbow Bend follows with 269,235 barrels, having taken third place from Elbing and Peabody field, although the latter showed an increase in its production records.

A total of 73 completions were reported in the state of Kansas, of which Montgomery County reported the majority of any other district with a total of 23 completions, of which 17 were dry holes. Greenwood County follows with 21 completions, of which the majority were producers.

Cowley County led Greenwood County to the tape in flush production figures, although reporting only eight producers, for a total of 3499 barrels. Greenwood County reported 2847 barrels from 13 producers. These two counties reported 6346 barrels out of 7861 barrels registered by the entire state.

A. A. Beard, general superintendent of the Tidal Oil Company, Tulsa office, has been made vice-president and general manager, being elevated to that position by virtue of the creation of an additional vice-presidency of the company.

J. W. Bates, for the past 10 years general superintendent of the Roxana Petroleum Corporation and the Comar Oil Company has been elected vice-president of the Reiter Foster Oil Corporation in charge of production.

During the time of his affiliation with the Roxana Company, Bates became a prominent factor in Mid-Continent producing circles, his outstanding success being in the development of the Comar Oil Company production in the Tonkawa field.

Bates, in company with W. A. Reiter, president and W. H. Foster, vice-president of the Reiter Foster Company, are now making an extensive tour of the company's holdings in north Texas.

May Double Oklahoma Gross Production Tax

Oklahoma City, Okla., Jan. 31.—As a means of providing more funds for the operation of the state government an increase in taxation on the oil industry in Oklahoma is threatened through the introduction today in the lower branch of the legislature of a bill for doubling the present levy on the gross recovery of crude oil.

The bill is sponsored by Sam F. Bailey of Pottawatomie County, who proposes a 6 per cent tax on oil, the present rate being 3 per cent.

The Bailey measure would increase the tax of all public utilities in Oklahoma and it is the claim of the state solon that enactment of this bill would increase the revenue from this kind of taxation from approximately $8,000,000 to as high as $19,000,000.

The tax rates in the Bailey bill as compared to present rates are as follows:

	Proposed Rate	Present Rate
Oil and gas	$ .06	$ .03
Lead, zinc, etc	.03	.005
Express companies	.06	.03
Telephone	.04	.02
Telegraph	.04	.02
Light, gas, power	.04	.0025
Waterworks	.02	.005

The method of distribution of moneys derived from this kind of taxation also would be changed, according to the Bailey bill. At present two-thirds of the money from the tax goes to the general state fund, out of which are paid current expenses of the state. The remaining third is turned over to the common school fund. Under the provisions of the Bailey measure the general fund would only get one-third, the common school fund of the state one-half, the common school fund of the counties one-twelfth and one-twelfth to the county road funds.

The tax on pipe line companies also would be increased by the Bailey bill, which would make the new tax on crude oil transporting companies three times the present rate of 2 per cent, or a total of 6 per cent.

It is believed that the measure will not be enacted into law, as there is a feeling in the legislature, in the upper branch at least, that there should not be any increase burdened onto the oil industry. In any event there would be public hearings called before any final action would be taken and the oil industry's side of the question then could be taken up and thoroughly gone into.

The Bailey bill likely will be referred to the house committee on revenue and taxation, of which John H. Miller of Tulsa is chairman. It is believed the sentiment of the committee will not be favorable to any increase in oil taxation.

Institute Will Conduct Thorough Study of Fire Protection for Tank Farms

IN order to obtain definite information concerning the degree of fire hazard of oil tanks to surrounding structures, the American Petroleum Institute at its recent convention in Fort Worth, Texas, appointed a sub-committee from its general committee on fire protection to make an investigation of this entire subject. This sub-committee consists of Ralph J. Reed, Union Oil Company of California; Frank A. Epps, Tide Water Oil Company, and H. L. Shoemaker, Standard Oil Company, (New Jersey) chairman.

As far as possible, every available compilation of tank fire records is being secured; the data therein confirmed and carefully analyzed. Extracts are being made of every tank fire report published by new bureaus and government bureaus. Authentic specific information is being solicited concerning each fire.

Companies engaged in oil refining storage or marketing are being requested to submit reports on every tank fire experienced by them during the last ten years. In addition, each of these companies is being asked to submit statements as to the practices it is now following, both in tank construction as well as tank spacing, so that reliable information will be gathered as to the present practices of the industry.

The work of securing all of this material is actively under way. Group conferences of oil companies are being held in the principal centers of the United States. Fire insurance companies, actuarial bureaus, government bureaus, petroleum and fire protection associations are being consulted in regard to the tank fire statistics that each may possess. Information obtained thereby is being compiled as rapidly as it is received.

The fundamental purpose of this investigation is to analyze the conditions under which oil tanks are ignited; to determine the conditions which cause such fires to spread, and to draw the line of reasonable demarcation between what constitutes fire exposure from oil tanks and what does not constitute such exposure.

Additional data as to the efficacy of fire walls should indicate as to what extent these are of value and what construction is most desirable.

This is, perhaps, the most comprehensive attempt that has even been made to obtain a complete and authentic tank fire record. While the specific company data obtained in this investigation will be held in strict confidence by the American Petroleum Institute, the conclusions which will be drawn therefrom will be made available to the oil industry at large, as well as to the arbitration committee which the National Fire Protection Association has appointed for the purpose of developing a table of distances at which oil tanks may be set safely from adjoining properties.

Once established, these distances will be included in a "model ordinance" recommended by the National Fire Protection Association and be available to municipalities throughout the country. Obviously, its effect will be far reaching.

The arbitration committee above referred to is composed of W. E. Mallalieu, representing the National Board of Fire Underwriters; G. S. Lawler, representing the Associated Factory Mutual Fire Insurance Companies; John Kenlon, representing the International Association of Fire Chiefs; Col. B. W. Dunn, representing the Bureau of Explosives, and W. R. Boyd, Jr., representing the American Petroleum Institute.

As it is probable that many of those who read this article may have specific data to contribute, the standard questionnaire which is being used to secure this information is shown accompanying. If any readers know of tank fires, the consideration of which may assist this investigation, it will be greatly appreciated if they will report such data to the sub-committee on fire protection, American Petroleum Institute, No. 15 West 44th Street, New York City, following the accompanying questionnaire as closely as practicable.

A.P.I. Form No. 2—1-12-25

REPORT OF FIRE

This Investigation is being made to secure FACTS as to *the conditions under which oil tanks are ignited*, and the *conditions which cause such fires to spread*. From the data which is collected an attempt will be made to establish SAFE DISTANCES at which oil tanks containing various grades of oil should be set from adjoining structures (e. g., other tanks, buildings, etc.)

In addition to submitting records for each tank fire proper, please fill out forms for cases where tanks have been exposed to other fires even though such fires did not ignite the tanks.

To show how a tank fire spreads—or does not spread, it is of the utmost importance that you attach drawings (or dimensioned sketches) showing *all* surrounding structures, that is, those that were NOT ignited by the fire, as well as those which were ignited. Please submit photographs if available.

1. Name of Company ..... Date of fire ..... 19.....
2. Location of fire .....
3. Description of Tank (or Tanks) .....
   - (a) Tank Number
   - (b) Capacity in bbls. (42's) or gals. (specify which)
   - (c) Dimensions
   - (d) Roof Construction (for vertical tanks)
   - (e) No., type and location of vents
   - (f) Gas-tight* or not
   - (g) If gas-tight, were all hatches, etc. closed when tank was ignited
   - (h) Kind of oil
   - (i) Approx. amount of B.S. and water in tank
   - (j) Gravity of oil
   - (k) Flash point of oil (and method of determination)
   - (l) Amount of oil in tank at start
   - (m) Was tank pumping-in, or pumping-out when ignited (or neither)
4. Description of Fire Walls or Dykes
   - (a) Effective Height
   - (b) Approx. diameter (or dimensions if rectangular)
   - (c) Made of what
5. Did oil get into fire wall enclosure, or spread beyond tank shell if there were no fire walls
   - (a) If so, did it become ignited
   - (b) How far from tank shell did burning oil spread
   - (c) Did oil go over fire wall
   - (d) If so, how far
   - (e) Distance to furthest adjoining structures that were ignited
   - (f) Distance to nearest adjoining structures that were not ignited
6. Account of fire—Give a brief narrative description of the fire, tell how it started, what were the wind conditions, *how the fire spread, what damage was done to adjoining property*, and how finally extinguished. (Use reverse side of this sheet and extra sheets if necessary.)

Report made by .....

Date of Report ..... Approved by .....

*Note: For the purpose of this investigation a tank may be considered to be of gas-tight construction if it be assumed that practically ALL breathing was passing through the vent opening.

How Californians Drill the Deep Ones

West Coast has 47 holes deeper than 5000 feet including two deepest ever drilled with rotary

By W. E. Green
Staff Representative

DURING the past two years, when deep wells were mentioned the mind of the oil man immediately turned to California where production is being secured from depths ranging from 4500 to 5400 feet in the southern part of the state. Previous to last year the three deepest holes ever drilled in the United States were located in West Virginia and in Pennsylvania. These three wells were the first, second and fourth deepest holes in the world. A well in Germany held the record for third deepest. But during 1924, a well in California took over the honors for the third deepest hole in the world, and is honored as the deepest drilled with a rotary.

Previous to last year the record for the four deepest holes in the world were as follows: Hope Natural Gas Company's J. H. Lake in West Virginia at 7579 feet; Hope Natural Gas Company's Goff in West Virginia at 7386 feet; well in Germany, 7348 feet, and Peoples Natural Gas Company's Geary well in Pennsylvania at 7248 feet.

The Union Oil Company's Gardena 1 in the Dominguez field since last July took over the honor for third deepest with a total depth of 7319 feet, the deepest hole ever drilled in the world with rotary tools. The second deepest rotary drilled hole in the world is the Standard Oil Company's Brownrigg Keller at Santa Fe Springs, which reached a depth of 7212 feet before the hole was plugged and abandoned as dry.

Deepest Rotary Hole

The Union Oil Company's Gardena 1 at Dominguez, Calif., was drilled in 314 actual drilling days, while the Standard's well was drilled in 323 actual drilling days. The Union's hole was abandoned July 17, 1924, which was 356 days from date of spudding. The core barrel was run into this well 60 times, with a score of 55 successful cores. The last core was taken from 7313 to 7316 feet, showing coarse gray sand of a texture and porosity similar to the formation higher in the hole. In this well 6-inch drill pipe was used to 7180 feet, after which 4-inch drill pipe was used. An ordinary wooden derrick was used without being reinforced and steam was supplied by two 70 horsepower boilers. The drilling stem weighed more than 57 tons, and for this reason the drill stem was floated into the hole by means of a valve attached at the bottom of the drill pipe. Only twelxe twist-offs were reported during the drilling of the hole, eleven of which were recovered and one had to be sidetracked. In all only 28 days were spent in fishing.

Due to the extreme depths of the wells mentioned, they are due special mention, as they both proved to be dusters and were abandoned. The wells drilled in the state in the past two years below 5000 feet are too numerous to mention, and, of course, many of them were dry.

Many Deep Producers

But many of California's deep wells have been producers. Not to mention the numerous deep producing wells drilled in 1923 in Southern California, it is only necessary to say that during 1924 a total of 47 wells were drilled to depths ranging from 5000 feet and deeper at Long Beach, Santa Fe Springs and Huntington Beach. But it is hardly worth mentioning Santa Fe Springs and Huntington Beach while writing about deep wells, since only three of the 47 deep ones mentioned were drilled in these two fields.

The 47 wells of 5000 feet depth and greater furnished a total flush production of 52,055 barrels, or slightly better than 1107 barrels per well as an average. The greatest production of any of the 47 was 4500 barrels, while a few fell below 100 barrels a day.

There are now approximately 20 wells drilling in Southern California at this time at depths ranging from 5100 to more than 6000 feet, and most of them are still going. The owners of several of these seem to feel that they will yet make producing wells of their deep holes. But there is a class of oil men in California who look with much disfavor upon any hole below 5200 feet unless the oil sand is found at lesser depth. But the oil man is naturally a pioneer and many times he can not resist the temptation when his well reaches an extreme depth to carry it on down as far as possible "just to see what he will see." And the information they pay good money for is being used to great advantage by the geologists.

Methods Used

Due to the number of deep wells drilled and drilling in California, it might be of interest to review in brief the methods used by the California oil man in drilling these deep tests. The brief description that follows is for the average well, and is not the story of any particular well. An effort has been made to be conservative in all respects.

Little special equipment is used in drilling the deep wells in California. The equipment, of course, must be of the heavy California type, and of the best, if costly accidents are to be avoided. The operators are careful in their selection of drill pipe, casing, etc. They know what lengthy fishing jobs cost.

The California derrick, 122 feet in height, is favored for the deep holes, and the derricks are divided about equally between wood and steel. Combination rigs are always used with a No. 5 rotary draw works and No. 10 table. Most of the operators use a battery of three 50 horsepower oil field type boilers, where one well is drilling, but where two wells are drilling close together a battery of five boilers are used. The boilers use gas if it is available, but in the case of remote locations, fuel oil is used. Two circulating pumps are in the rig at all times, as circulation of mud laden fluid is continuous and a second pump is ready should the other go bad for any reason.

Drill Pipe

Casing is set with the calf wheel in most instances, although in some instances the top casing is set with the draw works. It is customary to use 6-inch 24-pound drill pipe and as they go deeper, if a string of 8¼-inch is cemented, the drill pipe is switched to 4-inch 15.32-pound. If it should happen that the last water shut off is not successful it becomes necessary to cement a string of 4½-inch, and then the drill pipe is further reduced to 2½-inch.

Most any standard drill collar or tool joint is used, and in some instances the large companies make their own drill collars from steel of their own specification.

Disc bits are used largely, with some operators still sticking to the old fish tail for certain formations. Either disc or fish tails are used ordinarily early in the drilling operations unless the formations require rock bits. Some operators claim that they lose less time in the use of disc bits, as they can change discs with less loss of time. It is considered that the disc bit will make more hole in a given time when compared with the fish tail.

Quick Setting Cement

It usually requires 15 days from the spudding to cementing of the conductor or surface string, 12½ or 15-inch being used, although if it is expected to go much below 5000 feet, 15-inch surface casing is favored. The favored depth for this string is 1250 feet. About 275 sacks of cement is used in setting the surface string, the last 100 sacks being treated for quick setting. McDuffie and Konset processes for making cement set quickly are used largely, in addition to the Perkins process. This first cementing job can be drilled out in one or two days.

The average drilling time to next set is 25 to 30 days, according to formations and trouble. For instance at Rosecrans it is customary to set 11-

inch 54 pounds at about 3600 feet, while at Long Beach either 8¼-inch or 11-inch is set at approximately 3200 feet. In recent months operators are coming fast to the use of 11-inch altogether in the deep holes, as it is larger, there is less wear and tear due to rotating drill pipe, and also enables the drilling to a greater depth with a large hole and with larger drill pipe. In cementing this string about 300 sacks of cement is used, the last 100 sacks being treated as mentioned above. This set must stand from 2 to 5 days before drilling out.

The Water String

If a string of 8¼-inch has been set, the waiting time before drilling out is used for breaking down the 6-inch drill pipe and the making up of the 4-inch drill pipe, but if 11-inch was set, the same 6-inch drill pipe can be used and is. After drilling out the cement it is the practice to drill to the point where the oil sand is encountered. If after coring it appears that a commercial body of oil sand exists it is customary to cement what is known as the water string if intermediate water has been found between the shoe of the previous setting and top of oil sand.

The water string usually is 6¼-inch and is set in the shales just above the oil sand, using same cementing operation previously mentioned. After standing four or five days, permitting time for breaking down 6-inch drill pipe and making up 4-inch drill pipe. Prior to going in to drill out the cement a blowout preventor is placed on the water string. The cement is then drilled out to a depth of four or five feet below the shoe of the water string and well is swabbed or bailed until fluid level is down to about 1500 feet. Then the well is permitted to stand to determine if the water has been shut off. If there is no rise in the fluid level the well is swabbed or bailed down until the gas pressure is greater than the fluid, when the well will flow on its own accord.

Use Blowout Preventor

In a majority of cases where the water shut off has proven satisfactory and well shows oil in commercial quantities, it is the practice to drill ahead as far into the formation as is thought safe, stopping at a point thought to be at a safe distance above the bottom water, thoroughly mudding the hole to prevent blowouts. Prior to running in the oil string the blowout preventor is removed from the head of the water string.

After the finished depth has been reached the hole is circulated with a heavy mud, from four to 24 hours, the drill pipe is removed and the oil string consisting of 4½-inch casing or a liner of screen casing which has previously been made up is immediately started into the hole. The oil string as a rule consists of sufficient screen or slotted pipe to cover the distance from the finished depth to the shoe of the water string, the balance being blank pipe to the surface.

When the oil string has been landed the flow connection or Christmas tree is connected up and the well is now in condition to be placed on production. This is done by running the swab or bailer until the column of fluid in hole has been reduced to a point where the gas pressure in the oil sand is sufficiently strong to lift the column of fluid in the hole to the surface.

Use of Liner

A word about the use of the liner. The liner consists as a rule of sufficient screen to cover the open hole below the water string to finished depth and a joint or two of blank pipe with an adapter from the size of the liner to the size of the water string. This is equipped with left and right hand sub and lowered into the hole on the drill pipe. When landed on the bottom the drill pipe is rotated to the right, thus freeing itself from the liner and the drill pipe is then pulled from the hole. Tubing can then be run into the hole and swabbed the same as when an oil string is used.

Where the gas pressure is insufficient to flow the well, tubing is run into the hole with working barrel on bottom, and then the well is placed on the beam to pump.

Sometimes they bring in a well "barefooted." In a few instances in Southern California wells have been placed on production without using screen pipe in the open formation, being termed barefooted. This practice has not proven satisfactory, due to the fact that there is a large amount of open hole, much of which may be loose sand, and there is very great danger of the sand coming into the hole in such quantities that the well will sand up.

President Asks More Funds In Connection With Reserves

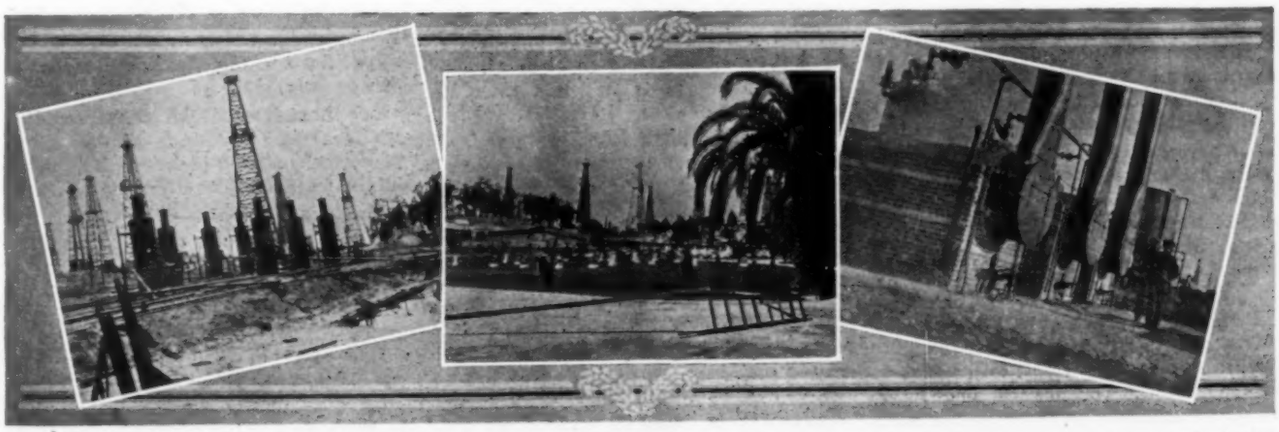
Washington, D. C., Feb. 3.—Considerable sums of money will still have to be expended in connection with the leases of the naval oil reserves, it is indicated by the request of President Coolidge for an appropriation of $100,000, to remain available until expended, "to enable the Chief Executive to continue such action as may be required for the purpose of insuring enforcement of either civil or criminal liability pertaining to oil leases made on naval reserves and the protection of interests of the United States in such reserves, under the provisions of Public Resolution No. 4, 68th Congress, approved February 8, 1924, and Public Resolution No. 8, 68th Congress, approved February 27, 1924."

Taylor Made Vice President

Houston, Texas. Feb. 2.—B. E. Taylor, manager of the oil well supply department of the Peden Iron and Steel Company was made a vice president of the company at the annual meeting held here today. Mr. Taylor's selection as a vice president followed action of the stockholders in creating the additional office. Allen V. Peden and C. W. Plowden were made assistant secretary and treasurer. Other officers and directors were re-elected.

Oklahoma Collects Over $10,000,000 from Oil

Oklahoma City, Okla., Jan. 24.—Money collected by the state on the gross production tax for the year 1924 is estimated at approximately $7,511,854.22. The state gasoline tax brought in a total of $3,187,035.04.



Scenes in California fields where deep drilling has reached a high stage of development. At the left is an installation of seven Lorraine Oil and Gas Separators at Santa Fe Springs. Part of the Long Beach field is shown in the center where deep production has been obtained. At the right is a battery of boilers on the Shell Lease in the Dominguez field.

Oklahoma Safety Rules Effective April 1

State Labor Department issues final draft on regulations for industry—Outgrowth of company efforts

Oklahoma City, Okla., Feb. 2.—A final draft on proposed mechanical safeguards for the petroleum industry has just been issued by the commissioner of labor of Oklahoma. Rules covering safety precautions for every phase of the industry where danger to human life is involved have been drawn up in the new orders. April 1, 1925, has been set as the date for the regulations to go into effect.

The action of the state in outlining these regulations for the protection of workers engaged in the oil industry is the outgrowth of safety work originally started by several of the larger oil companies in the Mid-Continent months ago. Results of state supervision over this kind of work will be watched very closely by the industry.

The state labor commissioner states that the regulations will be given a trial and are subject to revision at such times as members of the industry may be able to convince the commissioner that they are impracticable or unnecessary in any respect.

It is further stated that in the main the regulations are to refer to future installations, but in any case where present installations are affected the commissioner will be glad to confer with any companies so concerned in order that representatives of his department may make an investigation for the purpose of working out a simple and inexpensive change if one is deemed necessary.

Final hearing on the regulations was accorded the industry December 16th and since that time a number of minor revisions have been made. Following is the final and complete draft:

Petroleum Industry Safety Orders

(Subject to Revision)

Application of Petroleum Safety Orders: These orders shall apply to all equipment and operation appurtenant to the development and production of petroleum in the state of Oklahoma, as hereinafter specified.

Purpose: The purpose of these specifications is to provide reasonable safety for life and limb. Exceptions from the literal requirements may be granted for the use of devices or methods permitted, but only when it is clearly evident that equivalent protection is thereby secured.

Inspection: All material herein required shall be thoroughly inspected by the employer or his agent to make sure that material to be used is up to the standard called for in these regulations, and that any construction called for herein is of the required safety.

Wood Construction—Caution: Guards of wooden material are not recommended, as they are not durable and often produce an extra fire hazard. It being absolutely necessary that all guards be constructed and installed in such manner as to withstand the whipping and retaining of belts, chains, etc., should they break, the use of wooden or other makeshift material is to be discouraged.

Removal of Saftey Devices: No person shall remove or make ineffective any safeguard or any part of any safeguard on or around machinery while the same is in use, unless for the purpose of immediately making repairs thereto, and all such safeguards so removed shall be promptly replaced.

PART I

Specifications: Specifications hereunder quoted will be termed as "Standard" when called for as hereinafter provided.

Specification No. 1—Railing Guards

(a) Pipe Railings. (b) Angle Iron Railings. (c) Wood Railings.

1—(a). Pipe railings shall be construced of not less than 1¼-inch pipe; top railing shall be 42 inches from floor level; lower railing to be approximately half-way between the floor level and the top railing; upright to be spaced not more than eight (8) feet apart.

1—(b). Angle iron railings shall be constructed of not less than 1½x1½x 3-16-inch angle iron; top railing shall be 42 inches from floor level; lower railing to be approximately half-way between floor level and the top railing; uprights to be spaced not more than 8 feet apart.

1—(c). Wood railings shall be constructed of not less than 2x4-inch lumber; top railing shall be 42 inches from floor level; lower railing to be approximately half-way between floor level and top railing; uprights to be spaced not more than 8 feet apart.

Clearance: Where railing guards are used they must be set to clear all exposed moving parts not less than 15 inches nor more than 18 inches.

Doors and Gates: Where standard handrails are used, doors or gates allowing access inside the guard will not be permitted.

Floor Sockets: Where it is necessary to obtain access to enclosed parts, the guard must be constructed in section and set in floor sockets at least 6 inches deep.

Special Notice — Exception. The above specifications do not apply to existing installations. Where existing installations of handrail guards do not conform to the above specifications and requirements the department of labor will review the same for the purpose of working out an effective, inexpensive substitute.

Specification No. 2—Mesh Guards

Mesh guards shall be constructed on a frame not lighter than 1¼x1¼x3-16-inch angle or channel iron or 1¼-inch pipe. Filling material shall be of not lighter than 16 gage 1½-inch mesh wire, expanded metal, perforated metal, or sheet metal reinforced on the basis of 36x36 inches allowable area with material of equal dimensions of the frame. Filler must be placed inside of flanges, the sharp edges covered with metal strips or otherwise eliminated. Guards made of this material shall be set to clear all moving parts of machinery not less than 5 inches nor more than 15 inches. This type of guard shall extend to a height of 6 feet from floor or working level or shall completely enclose moving parts of object to be guarded.

Bearings: This type of guard must be constructed so as to leave all stationary bearings outside of guard where possible, or bearings must be tapped and equipped with extension oilers extending outside of guard.

Doors: Where this guard is used, doors full length of guard, allowing employes access within the guard, for the purpose of making repairs while the machinery is not in motion, must be provided.

Floor Sockets: Where it is necessary to obtain access to enclosed parts other than that afforded by doors, the guard must be set in floor sockets at least 6 inches deep.

Special Notice—Exception. The above specifications do not apply to existing installations. Where existing installations of mesh guards do not conform to the above specifications and requirements, the department of labor will review the same for the purpose of working out an effective, inexpensive substitute.

Specification No. 3—Toe Boards. (Where necessary.)

Toe boards shall be constructed of not less than ⅞x6-inch lumber or 16 gage steel metal 6 inches in height, securely fastened to railing uprights.

Specification No. 4—Disc Guards.

Where guards are required, as hereinafter provided for, and railings or mesh guards are impractical, disc guards of metal or fiber may be used on fly or balance wheels of not more than 4 feet in diameter, where such wheels do not extend through the floor. Such disc guards shall be so attached to the wheel as to eliminate the spoke hazard. When space is left between edge of disc and rim of wheel to facili-

tate turning the wheel over, it shall not exceed 2½ inches in width. When disc guard is used, all keys or other dangerous projections in hub or rim of wheel must be completely enclosed.

PART II.

Casinghead Gasoline Manufacturing Plants

Order No. 1—Fly Wheel Guards.

Fly wheels on all engines and fly wheels on air and gas compressors or other machinery shall be equipped with railing guards as specified in specifications 1-(a), 1-(b), or 1-(c), when such guards are not less than 15 inches from spokes of fly wheel, or shall be equipped with mesh guards as specified in specification No. 2-(a) when the guards are less than 15 inches from spokes of fly wheel.

Bearings: This type of guard must be constructed so as to leave all stationary bearings outside of guard where possible, or bearings must be tapped and equipped with extension oilers extending outside of guard.

Doors: Where this guard is used, doors full length of guard, allowing employes access within the guard, for the purpose of making repairs while machinery is not in motion, must be provided.

Floor Sockets: Where it is necessary to obtain access to enclosed parts other than that afforded by doors, the guard must be set in floor sockets at least 6 inches deep.

Order No. 2—Belt Guards

(a) Belts 7 feet or less above the floor level shall be guarded by railing guards as specified in specifications 1-(a), 1-(b), or 1-(c), of part one, which railing guard shall be erected on the working floor level, otherwise such belts shall be equipped with mesh guards as specified in specification No. 2-(a).

(b) Guards for inclined and horizontal belts over passageways: Frame and reinforcing of these guards must be made of not lighter than 1¼x1¼x 3-16-inch angle or channel iron or 1¼-inch standard pipe securely reinforced and supported at least every 6 feet by hangers or brackets of equal dimensions of the frame. This guard must be 2 inches wider than belt with side flanges at least 6 inches high. Filling material must be of not lighter than 16 gage 1½-inch wire mesh, expanded metal, perforated metal or sheet metal. This guard must be extended to wall or ceiling and must be constructed to completely enclose bottom, sides and ends of belts and pulleys so as to guard points of contact and retain the belt should it break; this guard shall be set to clear all moving parts not less than 5 nor more than 15 inches. Filler must be placed inside of flanges, the sharp edges covered with metal strips or otherwise eliminated. This order shall apply only to high speed belts. The standard handrail guard specified in paragraphs 1-(a), 1-(b) and 1-(c) will serve the purpose of eliminating the hazards of low speed inclined or horizontal belts over passageways, provided the minimum clearance between lower run of belt and floor at any point where railing passes under belt shall be not less than 6 feet 6 inches.

Bearings: This type of guard must be constructed so as to leave all stationary bearings outside of guard where possible, or bearings must be tapped and equipped with extension oilers extending outside of guard.

Doors: Where this guard is used, doors full length of guard, allowing employes access within the guard, for the purpose of making repairs while machinery is not in motion, must be provided.

Floor Sockets: Where it is necessary to obtain access to enclosed parts other than that afforded by doors, the guard must be set in floor sockets at least 6 inches deep.

Special Notice—Exception. The above specifications do not apply to existing installations. Where existing installations do not conform to the above specifications and requirements the department of labor will review the same for the purpose of working out an effective, inexpensive substitute.

Order No. 3—Overhead Runways or Platforms.

In gasoline manufacturing plants, overhead runways or platforms shall be protected with guard railings as specified in specifications 1-(a), 1-(b) or 1-(c), in part one, and with toe boards as specified in paragraph (a) of specification 3.

Order No. 4—Fly Wheel Pits and Belt Pits.

In gasoline manufacturing plants fly wheel pits and belt pits, where same extend below floor level or when the fly wheel extends to within 2 inches of the floor level, shall be protected with oe boards as specified in paragraph (a) of specification No. 3, which toe boards shall be in addition to guard railings hereinbefore specified.

Order No. 5—Starting Gas Engines

Safe and effective means, such as air or other mechanical starters shall be provided for starting gas engines of 40 horsepower or over.

Order No. 6—Air Tank Safety Valves.

Each air tank or battery of tanks shall be equipped with at least 2 standard safety valves.

Order No. 7—Pressure Lines.

Pressure line shall be equipped with fittings having a 20 per cent margin of safety over normal line pressure according to manufacturer's working pressure rating.

Order No. 8—Gage Glasses.

All pressure gage glasses in accumulator rooms shall be enclosed with not lighter than 18 gage ¼-inch mesh wire properly reinforced, or other approved type.

Order No. 9—Electric Generators and Storage Batteries.

All electric generators and storage batteries, excepting magnetos, shall be installed in separate rooms or buildings from the compressor room of casinghead gasoline manufacturing plants; however, this order shall not be construed to apply to vacuum and booster plants.

Order No. 10—Electric Wiring.

Electric wiring in all compressor, accumulator and tank houses must be enclosed in standard conduits and conduits grounded. The installation shall be in accordance with the rules and requirements of the National Electric Code.

Order No. 11—Switches.

No open electric switches controlling lighting or power circuits shall be located in the compressor room of casinghead gasoline plants; however, this order shall not be construed to apply to vacuum and booster plants.

Order No. 12—Lights.

Extension lights or lamps shall be provided with vapor proof globes protected by metal guards and any electrical cords approved by the Underwriters Laboratories.

Order No. 13—Safety Valves.

(a) Pressure lines and tanks shall be equipped with standard safety valves.

(b) No stop valve of any kind shall be permitted between the regular safety valve and compressor.

(c) The discharge of all safety valves shall be either by-passed to the low pressure side of compressor or discharged to the outside of the building.

Order.No. 14—Construction of Doors

The doors of all compressor rooms shall be so constructed that they will either slide horizontally or open outwardly. Under no circumstances shall the doors open inwardly.

Order No. 15—Gasometers and Gas Bag Regulators.

(a) When gasometers, other than the stuffing box type, or gas bag regulators, are located inside of buildings, the same shall be encosed in metal enclosures, and vented to outside atmosphere. These enclosure shall be made to open only from the outside of buildings.

(b) On new construction, gasometers other than the stuffing box type shall be placed on outside of buildings.

Order No. 16—Intake Air Lines.

Intake air lines for all gas engines in compression room shall be extended outside of buildings.

Order No. 17—Emergencies.

Fire plugs or fire plug boxes shall be painted a distinguishing color so as to be easily identified.

Order No. 18—Safe Tools.

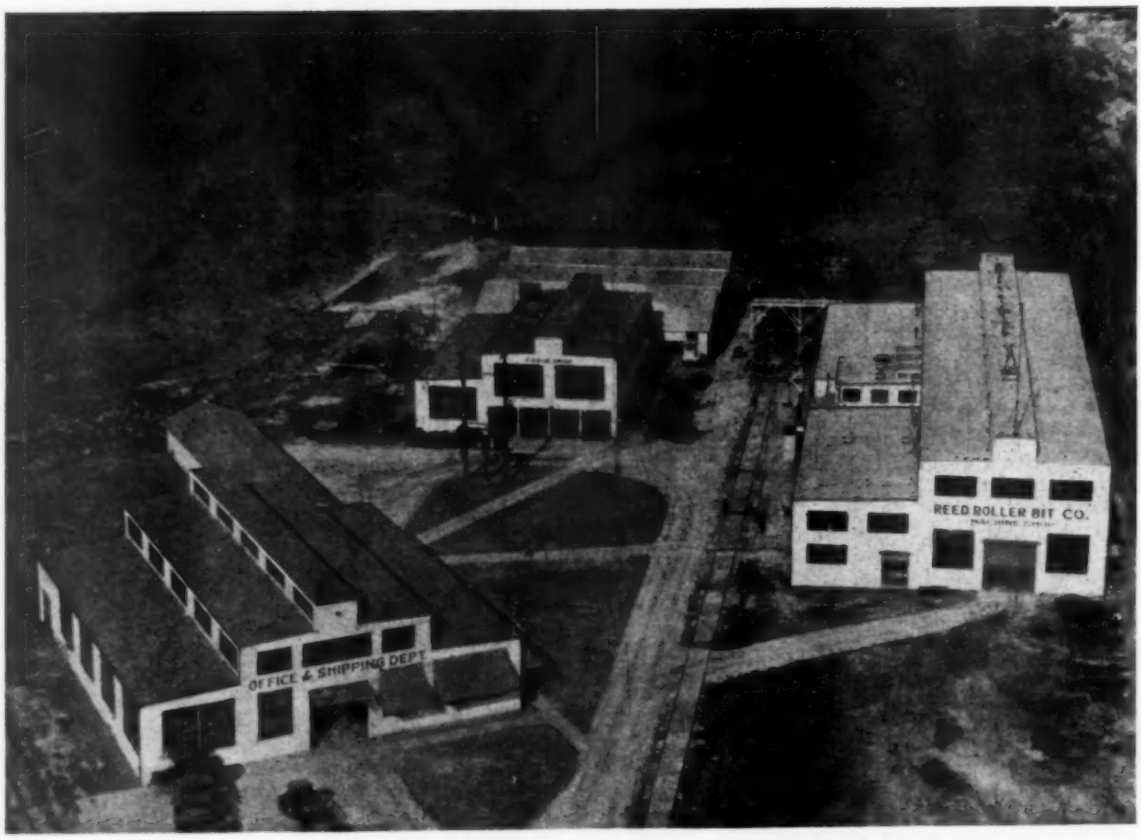
Hammers of non-ferrous metal shall be provided for use in compressor and accumulator buildings and for use in caulking tanks containing gasoline.

PART III

Erection of Steel Tanks and Scaffolding

In the erection of steel tanks there are two types of safe scaffolding to be considered, viz:

(Continued on page 74.)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OFFICE & SHIPPING DEPT.

Chance

Eliminate the chance in drilling operations through hard formations.

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You must be satisfied.

Guessin'

Why any duck ever went on a job just guessin' we can't "savvy".

No use guessin' whether you gonna make hole or not. Hang a Reed Roller Bit on the drill stem and go on down. There's no stoppin' for lubrication 'cause "slush" does that, and you'll cut more rock in less time 'cause they're "built that way."

Gimme a lift and le'ss go.

Reed Roller Bit Company

HOUSTON

NEW YORK LOS ANGELES

CRUDE OIL PRICE QUOTATIONS FOR ALL FIELDS

Crude Price Changes

January 30.—Effective at the opening of the market today the Standard Oil Company of Louisiana posted increases of 15 and 20 cents on all grades of crude it purchases in Arkansas and Louisiana. All other major purchasers in this area, excepting The Texas Company, met the posting on the day it was made. The Texas Company made its posting meeting the Standard's on January 31.

January 31.—Effective at the opening of the market today the Ohio Oil Company advanced the market price 20 cents on all crude the company buys in Mountain States. The posting was met by the Midwest Refining Company.

January 31.—Effective at the opening of the market today the Ohio Oil Company advanced the market price 25 cents on Central States crude.

January 31.—Effective at the opening of the market today, the Joseph Seep Purchasing Agency posted advances of 20 and 25 cents on Eastern States crude.

January 31.—Effective at the opening of the market today, the price of Canadian crude was boosted 25 cents per barrel, by the Imperial Oil Company, Ltd.

January 30.—Effective at the opening of the market today, the Prairie Oil and Gas Company posted advances of 15 and 20 cents in the price of Mid-Continent crude. All major purchasers met the posting with the exception of the Magnolia Petroleum Company.

January 31.—Effective at the opening of the market today the Magnolia Petroleum Company posted advances of 15 and 20 cents on crude it buys in the Mid-Continent. Corsicana light was advanced 30 cents. The Magnolia also posted advances of 10 cents in Lu'ing and Mirando crudes.

January 30.—Effective at the opening of the market today, the Gulf Pipe Line Company posted a 25 cent increase in the price of both grades of coastal crude. The advance was met by some of the companies on the same day, and the others followed on January 31.

February 2.—Effective at the opening of the market, the Magnolia Petroleum Company posted a price of $1.00 per barrel on Corsicana heavy, at the wells.

Current Postings

EASTERN STATES

	Feb. 4 1925	Feb. 4. 1924
New York Transit	$3.60	$4.50
Bradford (Pa.)	3.60	4.50
Other Pa. Grades	3.50	4.00
Cabel	1.95	2.05
Ragland	1.20	1.00
Corning	1.95	1.80
Somerset, medium	2.05	2.15
Somerset, light	2.20	2.35

CENTRAL STATES

Illinois	$1.87	$1.72
Indiana	1.88	1.73
North Lima	2.08	1.93
South Lima	2.08	1.93
Plymouth	1.37	1.10
Princeton	1.87	1.72
Waterloo	1.00	1.20
Wooster	1.95	1.80

WESTERN KENTUCKY

Posted by Indian Refining Company for crude from Allen, Warren, Franklin, Davies, Barren, Cumberland and Monroe Counties

36 and above	1.30	...
33 to 35.9	1.20	...
32.9 and below	1.10	...

CALIFORNIA

(Crude oil prices at well)

Los Angeles and Orange Counties

14 to 19.9 gravity	$1.00	$ .85
20 to 20.9 gravity	1.01	.86
21 to 21.9 gravity	1.02	.87
22 to 22.9 gravity	1.03	.88
23 to 23.9 gravity	1.05	.89
24 to 24.9 gravity	1.07	.90
25 to 25.9 gravity	1.10	.91
26 to 26.9 gravity	1.13	.92
27 to 27.9 gravity	1.16	.93
28 to 28.9 gravity	1.19	.94
29 to 29.9 gravity	1.22	.95
30 to 30.9 gravity	1.25	.96
31 to 31.9 gravity	1.28	.97
32 to 32.9 gravity	1.31	.98
33 to 33.9 gravity	1.34	.99
34 to 34.9 gravity	1.37	1.00
35 gravity and above	1.40	1.01
Fuel Oil	1.40	...

Rosecrans Field

36 to 36.9 gravity	$1.46	
37 to 37.9 gravity	1.52	
38 to 38.9 gravity	1.58	
39 to 39.9 gravity	1.64	
40 to 40.9 gravity	1.70	
41 to 41.9 gravity	1.76	
42 and above	1.82	

MID-CONTINENT

(Prairie Prices)

Below 30 gravity	$1.15	$ ...
30 to 32.9 gravity	1.35	...
33 to 32.9 gravity	1.55	...
36 to 38 gravity	1.70	...
39 to 41.9 gravity	1.85	...
42 and above	1.95	...

(Sinclair Prices)

Below 30 gravity	1.00	...
30 to 32.9 gravity	1.15	...
33 to 35.9 gravity	1.35	...
36 to 38.9 gravity	1.50	...
39 to 41.5 gravity	1.60	...
41.6 and above	1.85	...

(Texas Company Prices)

Below 30 gravity	1.15	...
30 to 32.9 gravity	1.15	...
33 to 35.9 gravity	1.55	...
36 to 38.9 gravity	1.70	...
39 to 41.5 gravity	1.85	...
42 and above	1.95	...

(Magnolia Petroleum Co.)

Under 28 gravity	.90	...
28 to 30.9 gravity	1.15	...
31 to 32.9 gravity	1.35	...
33 to 35.9 gravity	1.55	...
36 to 38.9 gravity	1.70	...
39 to 41.9 gravity	1.85	...
42 and above	1.95	...
Corsicana, light	1.80	...
Corsicana, heavy	1.00	...
Mexia	1.70	...
Thrall	1.00	...
Wortham	1.70	...

NORTH CENTRAL TEXAS

(Humble Oil & Refining Co.)

Corsicana, light (Powell)	1.80	1.60
Mexia	1.70	1.60
Currie	1.80	1.75
Richland	1.80	...
Wortham	1.70	...

RANGER

(Humble Oil & Ref. Co.)

30 and below	1.15	...
30 to 32.9	1.35	...
33 to 35.9	1.55	...
36 to 38.9	1.70	...
39 to 41.9	1.85	...
42 and above	1.95	...

WICHITA AND ARCHER COUNTIES

(Texas)

(Humble Oil & Ref. Co.)

30 and below	1.15	...
30 to 32.9	1.35	...
33 to 35.9	1.55	...
36 to 38.9	1.70	...
39 to 41.9	1.85	...
42 and above	1.95	...

Moran Crude

30 and below	1.15	...
30 to 32.9	1.35	...
33 to 35.9	1.55	...
36 and above	1.70	...

SOUTH TEXAS

	Feb. 4 1925	Feb. 4. 1924
Mirando (Texpata)	.80	.75
Mirando (Magnolia)	.85	...

SOMERSET

(Grayburg Pipe Line Company)

26 gravity and above	.95	...
Below 26	.85	...

GULF COAST

Grade "A"	1.75	...
Grade "B" at Blue Ridge, Hull and Pierce Junction	1.50	...

Big Lake (Reagan County)

36 to 38.9	$1.70	...
39 and above	1.85	...

LULING

All gravities	1.00	...

LOUISIANA-ARKANSAS

Caddo

38 gravity and above	1.80	...
35 to 37.9 gravity	1.70	...
32 to 34.9 gravity	1.60	...
Below 32 gravity	1.45	...

Homer

35 gravity and above	1.55	...
33 to 34.9 gravity	1.45	...
31 to 32.9 gravity	1.35	...
Below 31 gravity	1.20	...

COTTON VALLEY

All grades	1.25	...

Haynesville

33 gravity and above	1.45	...
Below 33 gravity	1.35	...

Bull Bayou

38 gravity and above	1.60	1.45
35 gravity to 37.9	1.45	1.30
32 to 34.9 gravity	1.30	1.15
De Soto crude	1.65	1.50
Crichton	1.45	1.30
Bellevue	1.75	1.30
Jennings	1.75	1.65
Vinton	1.75	1.65
Edgerly crude	1.75	1.65

Smackover

28 degrees and above	1.45	...
27 to 27.9	1.40	...
26 to 26.9	1.35	...
25 to 25.9 gravity	1.25	...
Below 25	1.15	...

El Dorado

33 gravity and above	1.45	...
Below 33 gravity	1.35	...
East Field (Calion)	1.15	...

Stephens District

26 gravity and above	1.35	...
Below 26 gravity	1.15	...

WYOMING-MONTANA

Wyoming

Elk Basin	1.65	1.55
Grass Creek	1.65	1.55
Rock Creek	1.40	1.30
Lance Creek	1.60	1.50
Mule Creek	1.25	.70
Big Muddy	1.30	1.10
Salt Creek	1.30	1.20
Osage	1.60	1.50
Hamilton Dome	1.05	1.40
Pilot Butte	1.00	1.10
Torchlight-Greybull	1.40	1.40

Montana

Sunburst	1.12	.70
Cat Creek	1.65	1.70

CANADIAN CRUDE*

Oil Springs	2.80	2.33
Petrolia	2.73	2.25

*Bounty on Canadian crude is ¼ cent per gallon, or 26¼ cents per barrel.

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Say you saw it in The Oil Weekly

Wortham Production Day to Day Through January

Date	No. of Wells	Total Output	Well Average
Jan. 1	18	65,055	3,614
2	22	66,675	3,021
3	25	85,260	3,410
4	29	102 090	3.520
5	32	107 690	3,334
6	34	106,225	3,124
7	40	131,360	3,284
8	45	123,705	2,749
9	46	137 995	2,999
10	47	144,758	3,080
11	52	153,510	2,827
12	58	151,615	2 614
13	65	165,450	2,553
14	67	164,060	2,448
15	72	165,515	2,298
16	77	163,430	2,119
17	82	182,830	1 864
18	84	143,695	1,773
19	87	138,295	1,589
20	90	131 485	1,461
21	96	132,570	1,381
22	101	120,410	1,192
23	112	123,060	1,098
24	116	114,265	984
25	131	107,690	822
26	135	100 375	743
27	143	88,540	619
28	144	77,335	538
29	146	80,220	549
30	153	81,400	532
31	163	75,350	468
Feb. 1	172	83,530	483
2	176	84 155	479

Wortham Offers Problems in Production

Air disappointing in first attempts. "Blowing by heads" may solve difficulties

By Grady Triplett
Staff Representative

Wortham, Texas, Feb. 3.—Although but little more than sixty days old, the Wortham pool is offering its leaseholders the problem of obtaining oil by mechanical means.

While this was expected, it has come much earlier than was anticipated. Besides that, the mechanical methods found successful in other pools of the Balcones Fault zone so far have been disappointing in the case of Wortham.

So far the air method of flowing wells has brought little reward. In fact a few wells have given higher daily yield when flowing naturally than they did when tried with heavy air pressure. Pumping has been a disappointment. The "agitation" with cable tools to stimulate flow, is, of course, a makeshift, to be abandoned when some other means is found successful.

Fluid Level Low

Expressions are numerous to the effect that the whole trouble at Wortham is that the Woodbine sand in this high spot of the faulted trap does not carry as great oil content as it did in the case of either Mexia or Powell. This is borne out in the fact that the fluid level of wells at Wortham is but little more than half as high at Wortham as it was at Powell, while it is less than half of that in the case of Mexia.

When it became necessary to blow and pump wells at Powell, the fluid level stood around 1100 feet. Mexia had numerous wells with a fluid column of 1400 feet from which to draw. Wortham, however, offers at this time a fluid column of 650 feet in the wells that have ceased flowing.

Wortham was tagged as a field, whose period of high flush yield would be brief. But it was expected to run uniform with Powell and Mexia in its rate of decline. It had, however, but 23 days of output above 100,000 barrels daily, coming into the charmed class January 4 and leaving it January 26.

Well Average Off

Monday of this week found the field producing 84,155 barrels from 176 wells, with no indication that its decline would be halted. What it will do for the remainder of February is problematical. Experiments with air may revive some wells, while drilling to the northeast may add some more territory to the field. Just as some observers looked upon Wortham as sure to reach 250,000 barrels daily, others are now predicting 50,000 barrels daily for the end of February. This may prove incorrect as early estimates were incorrect.

The well average for the field for the field records the drop in production. This had its peak January 4, when 29 wells flowed 102,090 barrels, an average of 3520 barrels each. Since then the well average dropped steadily until 421 barrels was the figure for Monday of this week.

Already drilling activity has yielded to the actions of the producing wells. Totals taken from drilling records at the end of last week showed 149 drilling wells, seven rigs, five derricks and 11 locations, 172 wells yet to be completed or given up. Opposite this was 10 drilling wells abandoned, with two rigs, two derricks and two locations abandoned.

Drilling Drops

These abandonments began to show in the drilling report when the wells already completed began dropping so rapidly in output. The first abandonments were noted on reports for the week ending January 8. In all 67 abandonments were recorded in January. Indications are that still others will be recorded during February.

Perhaps few more than 100 wells are to be completed in the present limits of the field. This will give the field 275 wells. A liberal estimate of the number of wells for Wortham is 300, while some predict a final total of 250 wells.

The number of wells in the field, as well as its future production, are dependent on the trend of the faulted structure to the northeast. Monday the Humble well, No. 7 on the Dodd 20-acre lease, was completed, making 137 barrels the first hour. The sand record is 3006 to 3026 feet. This makes it possible for the structure to take a northeasterly course onto the Humble's Pearl Jenkins lease, as well as the Simms 40-acre lease and the E. A. Peurifoy 180 lease held by the Gulf.

Too Many Rigs

But granting all that this possibility may add to the field, it will not be sufficient to give the field all that was hoped in the beginning.

Drilling at Wortham will be on the toboggan until the field is finally worked. This is a sad contrast with the rush that brought rigs into the field 60 days ago. Contractors and companies have shipped 250 rigs into Wortham. These are now ready for movement to other districts. Of the rigs brought to Wortham, they will not average two wells to the rig. So Wortham has been a losing affair so far as the contractor is concerned, since movement will eat up more than possible profit from drilling.

Drilling, however, is not the problem at Wortham now. The problem is one of coaxing oil from wells that have ceased to flow earlier than was anticipated. Success of air at Powell led to the introduction of this means at Wortham. So far it has not been successful. If, as seems true, the fluid volume of the sand does not compare with that of Powell and Mexia, "blow-

STATUS OF FIELD WORK AT WORTHAM

Company—	Wells Drilling	Rigs	Dks.	Lcns.	Drilling Wells Abn.	Rigs Abn.	Dks. Abn.	Lcns. Abn.
Atlantic Oil Prod. Corp...	1	..	..	..	..	..	..	..
Atlantic-Penn	2	..	..	..	..	..	..	..
Barkley & Meadows	1	..	..	..	1	..	..	..
Carter & Lytle	2	..	..	..	..	1	..	..
Jack Clark	1	..	..	..	..	..	..	..
Cranfill & Reynolds	2	..	..	..	..	..	..	..
Eastland Oil Company	1	..	..	..	..	..	..	..
Farish-Watts-Collins	3	..	..	..	..	..	..	..
Godley Oil Company	3	..	..	..	..	..	..	..
Gulf Production Co.	5	..	1	..	1	..	..	..
Gay Hammond	2	..	..	..	..	..	..	..
J. K. Hughes Dev. Co.....	5	1	..	1	..	..	..	..
Humble Oil & Ref. Co.....	39	..	..	3	1	..	..	1
Humphreys-Boyd Oil Co.	38	..	2	6	2	1	..	..
Magnolia Pet. Co.	5	4	2	1	..	..	..	..
Moss & Keeling	1	..	..	..	..	..	..	..
Moss et al	1	..	..	..	..	..	..	..
Murchison & Fain	1	..	..	..	..	..	..	..
Northwest Oil Co.	1	..	..	..	..	..	..	..
Patterson Lake Oil Co.....	1	..	..	..	..	..	..	..
Pure Oil Co.	1	..	..	..	2	..	2	..
Quaker Oil Company	1	..	..	..	..	..	..	..
Ramsey-Buttram	1	..	..	..	..	..	..	..
Republic Production Co. ..	3	..	..	..	..	..	..	..
Rio Bravo Oil Co.	4	1	..	..	..	..	..	1
Simms-Marland	8	1	..	..	..	..	..	..
Skelly Oil Company	1	..	..	..	..	..	..	..
E. L. Smith Oil Co.	2	..	..	..	1	..	..	..
Southern Exploration Co. .	3	..	..	..	1	..	..	..
Sun Oil Co.	1	..	..	..	..	..	..	..
Tarver et al	1	..	..	..	..	..	..	..
The Texas Company	6	..	..	..	1	..	..	..
Walsh et al	1	..	..	..	..	..	..	..
Wheelock-Collins	1	..	..	..	..	..	..	..
Totals 149		7	5	11	10	2	2	2

ing" can not be a signal success at Wortham.

Air Is Fickle

In this connection it is fair to state that "blowing" was not universally successful at Powell. Air caused some wells to flow at the rate of 3000 barrels daily at Powell. But other wells on the same leases would not respond to the introduction of air through the tubing. In a few instances, introducing air in one well increased the output of wells on adjoining leases. These are some of the queer cases of the introduction of air.

As a whole, however, air was successful at Powell and it was responsible for the continuous high yield of the field, after the gas pressure had been spent. Arrangement of piping was not uniform at Powell. But it consisted of forcing a column of air through the tubing to a point near the bottom of the hole, then allowing the air to escape into the column of oil standing in the casing, thereby causing it to flow.

When putting a well on air, the practice was to run the pressure to above 300 pounds. In a few cases it was run to 450 pounds and frequently two compressors were attached to one well. With the flow started, the pressure was brought down, 175 pounds being sufficient to flow the wells.

Output Disappointing

So far the use of compressors at Wortham has in no instance matched what was accomplished at Powell. When Simmons No. 2 of the Marland-Simms partnership was put on air, it started flowing at 1200 barrels daily. This soon dropped, however, to less than 400 barrels daily. This well is in the heart of the field.

No. 1 McCorkle of Atlantic-Penn partnership, flowed 585 barrels in 19 hours.

The Atlantic's No. 2 Hinchliff responded with 30 barrels in one and one-half hours on air.

Perhaps the best record of air flowing in the field is that of the Gulf Production Company's Lindley 1-A, which responded with 520 barrels in 11 hours and later flowed 1070 barrels with the aid of air. The Gulf had marked success with the use of air on its wells in the Powell field. This company has a department whose activities are devoted wholly to the use of air in connection with oil field development.

Oil Not There?

The fact that wells generally at Wortham have not responded to air as those at Powell did and the further fact that the fluid level at Wortham is not so high as it was at either Powell or Mexia is responsible for the opinion that the Woodbine sand is not holding oil at Wortham in quantities to compare with the other two fields. This is further augmented by the fact that the life of a flowing well at Wortham is not equal to the 30-day average of the Powell field.

On the other hand, sand conditions at Wortham are similar to those existing in the other two fields.

To those accustomed to problems in oil field engineering, the condition at Wortham presents something to be overcome. The air will force hundreds of thousands of barrels of oil from Wortham wells is an accepted fact, to those knowing its possibilities. But they recognize that methods finally successful will not be identical with those at Powell.

Blowing By Heads

If, as many believe, the sand at Wortham does not hold sufficient oil to permit constant flowing, the next plan to be tried will be that of "blowing by heads." This can be accomplished by equipping the air line to each well with a clock control. This clock will permit entrance of air into the well at fixed times and for fixed duration.

Before a control of this type can be placed, the proper periods for blowing the well must be determined by trial and error. Once it is known how many times each 24 hours and for how long each time a well will respond, then the clock-control can be adjusted to correspond to these periods.

This corresponds to the pumping periods, which apply to wells in the older fields.

Compressors being set up at Wortham are driven by electric motors, gas engines and steam engines.

Before air is used, many wells will be flowed through tubing. This method is already being adopted. Tubing is run, while the annular space between tubing and casing is closed, forcing the oil through the tubing, flow being obtained because of the smaller outlet.

Period of Lull

Swabbing is successful, while standard rigs are being used for pumping.

A phase of the situation not to be overlooked is a characteristic of fields of the Balcones Fault zone to have a period of low yield between the passing of the gas pressure and the gaining of full benefit of water pressure. At Powell, the output of the field went down with the passing of the gas head. Then when water began to come in great quantities, the oil ouput was increased. It is possible that Wortham is now at this stage.

Revision of figures on the ultimate yield of the pool is due under present conditions. Estimates on this have varied from 26,000,000 to 50,000,000 barrels, with 35,000,000 a favorite figure.

Helena, Mont., Jan. 30.—A bill is to be introduced in the general assembly of this state to provide for the regulation of drilling, casing and abandonment of oil and gas wells and to require the filing of a log of all wells with the state railway commission.

The bill is sponsored by State Senator Leuthold and would provide rules for drilling, etc., along the lines prescribed by the United States bureau of mines.

J. M. Jegglin who has been office manager of the Gustin-Bacon Manufacturing Company in the Tulsa office, has joined the sales force of the company and is making the Mid-Continent oil field territory. He is succeeded as office manager by P. D. McKinney. N. M. Grove is manager of the Tulsa office of the Gustin-Bacon Manufacturing Company.

Big Well Completed in Old Ventura Field

Thousand feet of sand yields 4500 barrels daily for Associated; California production declines

Los Angeles, Calif., Jan. 31.—The Associated Oil Company this week completed its Lloyd 9-A in the old Ventura Avenue field in Ventura County for 4555 barrels of 29.8 gravity clean oil at a total depth of 5150 feet. The well is making 3,500,000 cubic feet of gas with a casing pressure of 440 pounds and trap pressure of 50 pounds, flowing through a 15/16-inch bean. The second day's production was slightly less than the first day and it produced 4500 barrels on Friday.

The bean was first increased to one inch and Thursday was increased to 1⅛ inch. The well was placed on production at 2 p. m. January 27, having been spudded on August 3, 1924. It was drilled with rotary tools in proven territory where other wells are producing from 4000 to 4400 feet, from the same formation.

Largest Well in State

This gives the Ventura Avenue field the largest producing well in California at this time, and indications are that its production will hold up for many weeks to come, due to the large amount of pay formation that is taken in. The well is also the best well completed in Ventura County for at least ten years.

A string of 18-inch casing was cemented at 603 feet, another string of 11-inch was cemented at 2550 feet, a third string of 8¼-inch was cemented at 4145 feet and the last string of 6¼-inch was run to bottom of hole, with 989 feet of Emsco 100 mesh screen at bottom of string.

A Hard Job

The crew experienced considerable difficulty in making the last 1000 feet, due to the heavy gas pressure found all the way. The mud was weighed each day to see that it had sufficient weight to hold the gas. The formations showed a bad tendency to cave at all times, and much credit is given the resident geologist, who spent most of his time right on the job, and to the drilling crew and other officials. Probably the geologists gave closer attention to the drilling of this well than to any well yet drilled in Ventura County.

The Associated Oil Company is now drilling three other wells in this field and locations are now being made for two others. The company is the last of the larger companies to start operating in the field and with the new well has about three-fourths of the total daily production. The company now has seven flowing wells and one on the pump.

50 Gravity Oil

It is in this field that the General Petroleum Corporation has two wells producing 50 gravity oil. One of the wells blew out and wrecked things and about 10 barrels is flowing daily from the crater, 50 gravity oil. The second hole is also producing 54 gravity oil, but in a very small amount.

The Associated Oil Company lost three holes in the field during its drilling campaign. It also lost two very deep wildcats, one at 5215 feet and the other at 5492 feet. The first mentioned was far to the west of production, while the last mentioned was far to the east, thus disproving those areas. The company holds a large acreage, much of which has been proven.

To Drill Ocean Park Heights

The Union Oil Company this week made location for its first test in the Ocean Park Heights area and the hole will be spudded early next week. The Union, Standard, Marland and other companies secured acreage in this area during the past month, paying from $200 to $700 an acre bonus. There are many town lots and building sits in this district and a number of community leases have been blocked.

The Southern California geologists are not overenthusiastic over the Ocean Park Heights district, but they seem to feel that the chance for production is sufficient to justify the drilling of two or three wildcats, but few of them think that the chances for production is sufficient to justify bonuses that are being paid.

Good Well at Rosecrans

The Pacific Petroleum Corporation's Athens 2 in the Rosecrans field went on production late in the week for 1300 barrels at 4924 feet. The well is located about the center of the field and it is flowing without screen. This new well is near the Union's Trust 2, which declined 60 per cent in production in ten days and likely the Pacific Petroleum producer will act accordingly.

In the Rosecrans field the Union's Trust 1 on the western edge of production picked up an oil sand at 5775 feet, and during the past week its Gordon test on the south edge found an oil sand at 6175 feet. On the eastern edge of the field the Union also found an oil sand in its Zins 1 at 5696 feet. The Gordan passed out of the oil sand at 6190 feet. The General Petroleum is still reaming its Amstoy 1 on the extreme west edge of the field, having about 300 feet yet to ream before reaching 6640 feet, where a string will be cemented. The hole has about 25 feet of oil bearing shale at bottom of hole.

Production Off Again

The daily production in the Los Angeles Basin fields the past week was off about 4000 barrels, daily average. Long Beach showed a loss of about 1500 barrels, while Dominguez was off 2000 barrels. Santa Fe Springs, Torrance and Rosecrans about held their own.

Humble Pipe Line Stock Is Doubled; Officers Elected

Houston, Texas, Feb. 2.—Stockholders of the Humble Pipe Line Company today increased the capital stock of the company from $12,000,000 to $24,000,000 in order to finance extension of the company's facilities into Reagan County and other sections of the state.

The board of directors elected by the stockholders to serve for the ensuing year include R. V. Hanrahan, W. S. Pillow, W. M. Cleaves, John C. Townes, Jr., F. F. Mellott and J. A. Neath.

Following the stockholders meeting, the board of directors elected the following officers for the year: R. V. Hanrahan, president; W. S. Pillow, vice president and treasurer; R. S. Burdick, secretary and assistant treasurer; C. D. Voss, assistant secretary.

Work Started on Six-Inch Line to South Liberty Field

Houston, Texas, Feb. 3.—Mills Bennett, independent operator in the new field at South Liberty, has started work on a six-inch pipe line from that field to a line at Barbers Hill, a distance of 16 miles, in preparation for contemplated production in South Liberty.

Oil run through the line to Barbers Hill will be carried from there to the Swiftsure Petroleum Company's terminal on Cedar Bayou through six miles of another six-inch line, owned by the above company.

Construction work started Tuesday on a 55,000 barrel tank in the South Liberty field. It will serve as an emergency reservoir until the line is completed.

D. T. Harrington, formerly production foreman for the Louisiana Oil Refining Corporation in the Burkburnett district of Texas, has been transferred to Oil City La., and placed in charge of the Louisiana's producing properties in the Caddo fields.

Speed Development of Reagan County Field

Turn of crude market brings incentive to deliver above minimum contract; Humble rushing pipe line

By H. H. King
Staff Representative

Fort Worth, Texas, Feb. 2.—Having the assurance of a market for all crude that can be handled through an eight-inch pipe line via the Ranger district to the Gulf Coast, the two producing companies in the Big Lake field, Reagan County, announced nine new locations during the past week. These new locations were made along the dividing line of the two companies' leases in the proven area, making a total of 17 locations to be drilled up as soon as facilities are available to handle the crude as produced. Six of this number have been started, while materials are moving in for the balance. The Big Lake Oil Company announced five new locations last week, making a total of 10 tests remaining to be completed, while the Texon Oil and Land Company added four new locations to its present list of three tests underway.

A limited amount of the production of these two producing companies has been contracted at the average Mid-Continent posted price by the Reagan County Purchasing Company, which in turn made contracts with Humble to build a pipe line outlet for the field. Humble began construction work some weeks ago on an eight-inch line from the Reagan County Purchasing Company's tank farm near the field to San Angelo, a distance of about 75 miles, and at that time it was planned to relay the crude to the Gulf Coast via tank cars from San Angelo. However, the favorable turn of the crude market lately has resulted in Humble taking steps to continue the eight-inch line from San Angelo to its main Ranger district pump station at Comyn, Comanche County, making a total of about 180 miles of pipe line construction work necessary to connect the Big Lake field with Humbles' present Central West Texas trunk line system to the Coast. Humble has completed more than 25 miles of the Big Lake-San Angelo unit of its line, with ditching machines and gangs working on both ends to expedite the construction work. The ditching for this line is proving costly and slow work owing to a large portion of the land being hard rock that requires blasting. However, Humble plans to have the San Angelo unit in operation by March 1, and crude will be relayed in tank cars until the extension to Comyn is completed.

The 14 flowing and pumping wells in the Big Lake field were producing in excess of 12,000 barrels daily early this week, with back pressure being carried on most of the flowing wells. Completed wells have maintained an unusually steady production, and the additional crude expected from the tests now drilling or getting underway could build the output of the field above the capacity of the pipe line being erected by Humble, although it is not planned to drill in these tests unless facilities are available to handle the oil as produced. The Big Lake and Texon Oil and Land Companies contracted to sell a maximum of 10,000 barrels daily during the first year of their contract, and 20,000 barrels daily maximum from then on for the life of the leases, but present attractive crude prices and desire of all parties concerned in the crude contract to move more oil from the field will result in more crude being produced and sold than originally contracted for.

The Reagan County Purchasing Company will start filling its first three completed 80,000 barrel tanks near the field this month, while the remaining seven tanks will be available for storage in rapid succession. About 585,000 barrels was in storage in the Big Lake field at the close of January. Big Lake crude is now commanding a price of $1.70 per barrel at the well, as the oil averages 38.6 gravity.

No Line Fight

The new locations made by Big Lake and Texon do not indicate a "line fight" between the two companies, as both concerns are adhering to their policy of limiting one well to 40 acres, and the Texon Company elected to drill on the west line of its holdings first because of this being the only part of their lease proven to date. Texon has two tests drilling beyond the present proven area, and recently abandoned its University 1, Group 2, section 22, block 9, after drilling to a total depth of 6002 feet. This hole is probably the deepest cable tool test in the state.

Brandon-McCamey et al's University 1, section 27, block 2, located nearly three miles northwest of the Big Lake field, failed to show oil or gas when drilled to 3204 feet last week, and has been ordered plugged. The California Company's University 1, section 13, block 8, located about two miles south of the field, was also considered doubtful of making a producer according to late reports from the field while drilling below 3000 feet.

Oil and Gas in Falls County Wildcat; Would Extend Balcones Region South

Mexia, Texas, Feb. 2.—A lone wildcat test drilling in the vicinity of the famous short lived gusher on the Jones land at Kosse caused new interest to be shown in this section of the Balcones-Mexia fault region late last week when oil and gas appeared after drilling into the top of the Edwards lime, which furnished oil production in the Kosse discovery well in August, 1922. The new wildcat test was drilled on the J. W. Preston lease, H. Anderson survey, in eastern Falls County, by C. W. Harrison and associates, and is credited with having drilled about eight feet into the Edwards lime to a total depth of 3618 feet. A string of 6⅝ inch casing was being lowered early this week to the top of the pay, and will be cemented before drilling is resumed. Flow tanks were also moved in and set up to be prepared in the event of a producer resulting when the test is drilled in.

The showing made by this test has aroused considerable interest, but its possibilities of making an oil producer and establishing a new field in East Central Texas will not be determined until drilling is resumed. It has greatly encourged additional wildcat drilling in this section of the fault region, regardless of the final outcome, and one test will be started shortly to the south and west by the Reiter-Foster Oil Corporation. The wildcat test on the Preston land is located about two miles southwest of the Kosse discovery well, and about equal distance west of Kosse. The log of the test shows that it passed through the Buda limestone at 3543 feet, with shale continuing to 3610 feet, where the Edwards lime was first encountered. These depths are based on pipe measurements. The Kosse discovery well had a total depth of 3767 feet, and the depth and thickness of the oil pay was never fully determined. The Preston wildcat was financed through the sale of nearby leases to numerous companies already active in the fault zone, and most of the acreage has been split up in small tracts, threby giving many concerns representation in the event of a field. Brandon & McCamey of Fort Worth drilled the hole.

Lease buying has lately been unusually active along the trend of the fault between Mexia field and the Kosse district, and attractive prices have been paid for leases. Humble Oil and Refining Company and Pure Oil Company have been the largest buyers, while the former company is credited with having spent more than $250,000 for leases in the vicinity of Thornton during the last half of January. Other companies have buyers in the district taking scattered lease protection.

Showing Interior of Butler Bolted Pressure Flow Tank

Hold up your gravity!

The high gravity vapors try to steal away. And they will unless they are stopped.

Experts agree that one to two barrels of oil vaporize in one day—even in small tanks—unless they are held. And this loss, of course, decreases gravity. But it isn't necessary to have low gravity—not when you can get

BUTLER
Bolted Tanks

They are high gravity maintainers! Where vapors stole away before, decreasing gravity, they maintain gravity. They insure your oil value. They insure your profits.

Are dependable!

It's easy to see why they serve so well and are so dependable. Only the best grade steel is used —only modern machinery is used. The steel is open hearth, copper bearing, blue annealed. This permits excellent workmanship.

Special blanking, punching and forming dies insure absolute accuracy and uniformity. Nothing is left to human accuracy. There is not even a possibility of a variation in hole placements of a thousandth part of an inch! This up-to-date machinery insures all parts fitting perfectly.

Write for latest prices

With quality we also give service and quote attractive prices. See our dealer nearest you or let us quote you. Special literature is yours for the asking.

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You can get speedy service from these advantageously located dealers:

M. & V. Tank Co., at Wichita Falls, Vernon and Olney, Texas.

Drane-Humphrey Co., at Fort Worth and Big Lake, Texas; Tulsa and Holdenville, Okla.

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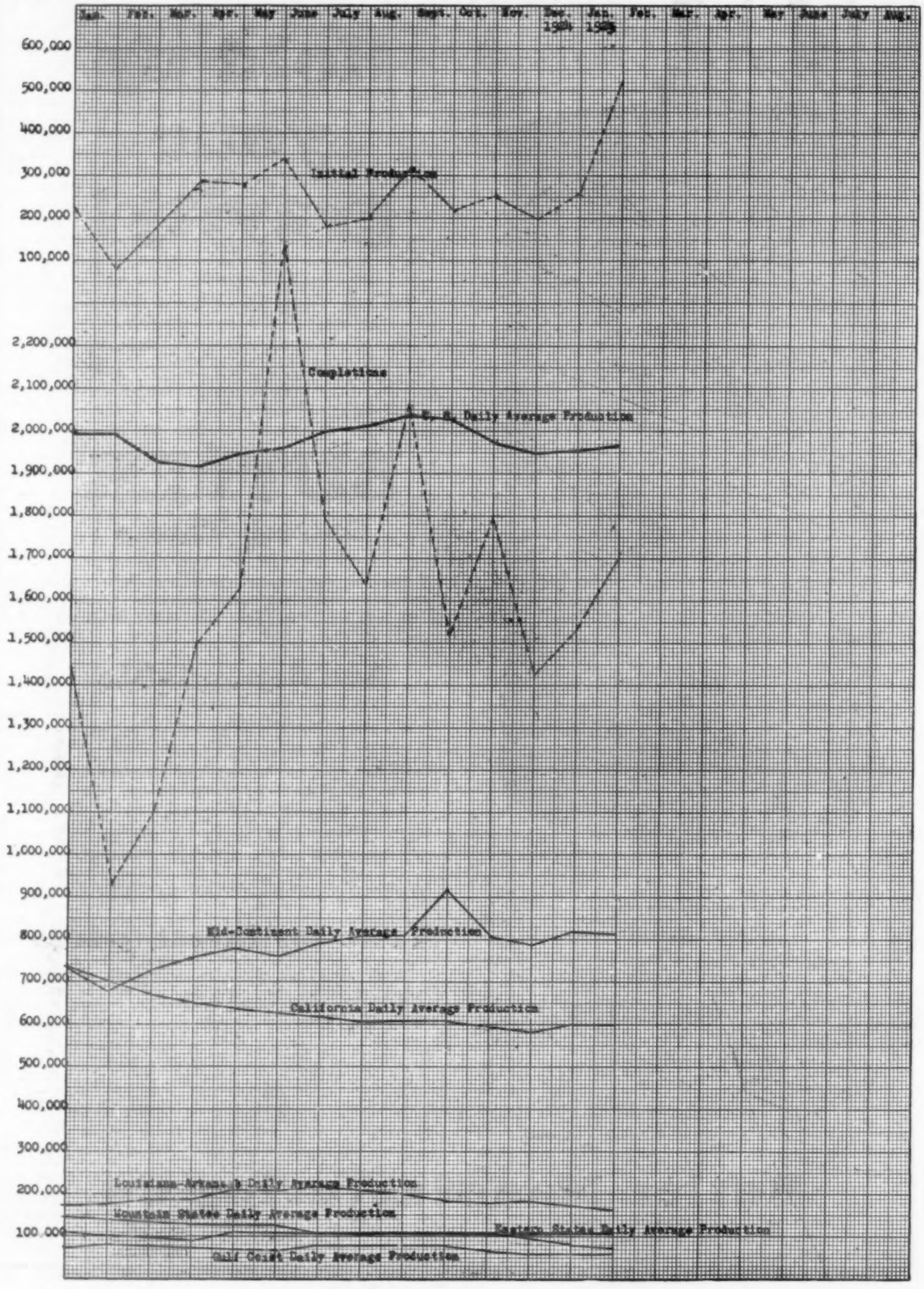
M. A. Trimmer at Blackwell, Okla.

Wilson Tank & Culvert Co., at San Antonio, Texas.

Butler Manufacturing Co., at Los Angeles, California, Bartlett Bldg., Telephone Tucker 5457.

Butler Manufacturing Co.
Kansas City, Mo. **Minneapolis, Minn.**

U. S. PRODUCTION AND FIELD STATISTICS



Summary of Field Operations for January

Eastern States

(Continued from page 26)

County—	Completions	Producers	Gas Wells	Failures	Initial Prod.
Pennsylvania	156	109	32	15	506
W. Virginia	172	41	103	28	482
Ohio	163	84	53	26	1,888
Kentucky	108	78	8	22	1,973
Indiana	12	8	1	3	83
New York	18	17	1	..	48
Illinois	17	6	..	11	213
Totals	646	343	198	105	5,195

PENNSYLVANIA

Allegheney	1	..	..	1	....
Bradford	83	80	..	3	287
Butler	12	9	..	3	52
Center-Middle	4	2	..	2	4
Clarion	9	5	3	1	14
Clearfield Field	1	..	1	..	....
Greene	27	3	22	2	115
Helen Furnance Field	6	1	4	1	8
Venango	10	8	1	1	21
Washington	3	1	1	1	5
Totals	156	109	32	15	506

WEST VIRGINIA

Boone	2	..	2	..	....
Braxton	2	..	2	..	....
Cabell	6	1	4	1	2
Calhoun	10	7	3	..	53
Clay	2	1	1	..	10
Doddridge	12	6	4	2	49
Gilmer	16	2	13	1	25
Harrison	13	..	10	3	....
Kanawha	8	1	6	1	45
Lewis	8	1	4	3	10
Lincoln	12	..	11	1	....
Marion	6	1	4	1	10
Marshall	4	2	2	..	20
Monongalia	4	..	4	..	....
Nicholas	1	..	1	..	....
Pleasants	2	1	1	..	3
Ritchie	26	6	13	7	53
Roane	12	3	7	2	30
Tyler	6	2	4	..	15
Wayne	1	..	1	..	....
Wetzel	10	3	6	1	130
Wirt	3	1	..	2	2
Wood	6	3	..	3	25
Totals	172	41	103	28	482

KENTUCKY

Allen	16	8	..	8	704
Barren	22	15	2	5	100
Clay	1	..	1	..	....
Cumberland	3	2	..	1	150
Estill	1	..	..	1	....
Floyd	3	2	1	..	20
Johnson-Magoffin	9	8	1	..	64
Lawrence-Johnson	18	17	1	..	468
Lee-Owsley	8	6	1	1	124
Logan	1	1	..	..	85
Morgan	1	..	..	1	....
Owensboro	7	5	..	2	56
Warren	11	10	1	..	185
Wayne	7	4	..	3	17
Totals	108	78	8	22	1,973

INDIANA

Adams	2	2	..	..	32
Delaware	1	1	..	..	3
Gibson	3	1	..	2	1
Jay	3	3	..	..	37
Randolph	1	..	..	1	....
Sullivan	1	..	1	..	....
Wells	1	1	..	..	10
Totals	12	8	1	3	83

OHIO

County—	Completions	Producers	Gas Wells	Failures	Initial Prod.
Allen	4	3	..	1	82
Ashland	1	..	1	..	....
Athens	13	5	5	3	28
Auglaize	3	3	..	..	35
Columbiana	1	1	..	..	2
Coshocton	2	..	1	1	....
Cuyahoga	1	..	..	1	....
Darke	1	..	..	1	....
Fairfield	2	..	1	1	....
Guernsey	1	..	1	..	....
Hancock	2	2	..	..	25
Hardin	3	2	1	..	45
Hocking	7	5	..	2	208
Holmes	14	3	8	3	50
Jackson	3	..	3	..	....
Knox	4	2	2	..	65
Licking	16	15	1	..	395
Lorain	2	..	1	1	....
Medina	1	..	1	..	....
Meigs	3	3	..	..	18
Mercer	7	4	3	..	29
Monroe	6	6	..	..	13
Morgan	3	3	..	..	55
Muskingum	1	..	..	1	....
Noble	8	4	1	3	11
Ottawa	6	5	..	1	76
Paulding	2	2	..	..	60
Perry	5	3	..	2	359
Shelby	3	1	2	..	8
Vinton	1	..	1	..	....
Washington	17	5	8	4	32
Wayne	15	2	12	1	45
Wood	5	5	..	..	37
Totals	163	84	53	26	1,888

NEW YORK

Allegany	17	17	..	..	48
Dunkirk	1	..	1	..	....
Totals	18	17	1	..	48

ILLINOIS

Clark	6	5	..	1	138
Crawford	2	..	..	2	....
Fayette	1	..	..	1	....
Marion	4	..	..	4	....
Wabash	4	1	..	3	75
Totals	17	6	..	11	213

Oklahoma

Beckham	1	1	..	..	15
Burbank	10	10	..	..	1,235
Caddo	1	..	..	1	....
Carter	10	9	..	1	766
Cotton	2	..	1	1	....
Creek	31	20	2	9	2,619
Garfield	6	6	..	..	279
Garvin	1	1	..	..	18
Grady	2	..	1	1	....
Grant	1	1	..	..	55
Greer	3	..	..	3	....
Hughes	15	11	..	4	10,417
Jefferson	3	..	..	3	....
Kay	42	36	..	6	51,802
Lincoln	3	1	..	2	25
Love	1	..	..	1	....
McIntosh	1	1	..	..	75
Muskogee	1	1	..	..	15
Noble	6	5	..	1	2,195
Okfuskee	15	7	2	6	6,240
Okmulgee	20	9	2	9	2,005
Osage	25	12	1	12	4,701
Pawnee	8	3	1	4	235
Payne	2	..	..	2	....
Rogers	5	2	2	1	60
Seminole	35	26	4	5	9,293
Sequoyah	2	..	..	2	....
Stephens	7	..	2	5	....
Tulsa	13	7	2	4	152
Wagoner	9	1	2	6	20
Washita	1	..	..	1	....
Totals	282	170	22	90	90,122

OKLAHOMA SUMMARY OF MONTHLY PRODUCTION BY FIELDS

Field—	Barrels
Tonkawa	3,069 806
Burbank	1,864,309
Bristow	1,493,115
Cromwell	1,057,627
Osage (outside Burbank)	1 075,514
Gilcrease-Papoose	1,000,029
Okmulgee	775,031
Cushing	709,311
Hewitt	545,817
Wewoka	363,072
Healdton	370,667
Otoe	265 298
Duncan and Walters	256,928
Stroud	87,978
Other fields	2,014,380
Total	14,948,882

Kansas

County—	Completions	Producers	Gas Wells	Failures	Initial Prod.
Chautauqua	4	2	1	1	750
Cowley	12	8	2	2	3,499
Elk	10	3	2	5	100
Greenwood	21	13	1	7	2,847
Montgomery	23	5	1	17	655
Sumner	2	..	..	2	....
Woodson	1	1	..	..	10
Totals	73	32	7	34	7,661

KANSAS SUMMARY OF MONTHLY PRODUCTION BY FIELDS

Field—	Barrels
Greenwood	687,549
Eldorado	504,525
Rainbow Bend	269 235
Elbing and Peabody	243,195
Fox-Bush	142,817
Augusta and Douglas	92,659
Blankenship	83,235
Florence and Covert	71,703
Other fields	634,322
Totals	2,729 240

Mountain States

WYOMING

County—	Completions	Producers	Gas Wells	Failures	Initial Prod.
Salt Creek	12	10	2	..	5,185

MONTANA

Beaver Creek	1	..	..	1	....

California

Brea	1	1	..	..	700
Comanche Point	1	..	..	1	....
Coyote Hills	..	..	..	..	....
Dominguez	8	8	..	..	13,860
Elk Hills	2	2	..	..	260
Huntington Bch.	5	5	..	..	1,490
Inglewood	1	1	..	..	300
Jacalitos Dome	1	..	..	1	....
Long Beach	3	3	..	..	1,035
McKittrick	2	2	..	..	30
Midway	3	3	..	..	1,675
Montebello	1	1	..	..	780
Rosecrans	7	7	..	..	4,615
Santa Fe Springs	1	1	..	..	200
Santa Barbara County	2	..	..	2	....
Santa Clara County	1	..	..	1	....
Sunset	5	5	..	..	430
Torrance	24	24	..	..	2,585
Ventura	5	5	..	..	2,370
Wheeler Ridge	1	1	..	..	160
Totals	74	69	..	5	30 490

*Statistics for Southern Fields only.

Louisiana

Field—	Completions	Producers	Gas Wells	Failures	Init. Prod.	Monthly Prod.
Anse La Butte	..	..	..	..	....	620
Bellevue	..	..	..	..	....	116,684
Bull Bayou	..	..	..	..	....	140,895
Caddo	4	4	..	..	130	356,066
Cotton Valley	19	14	4	1	2,050	199,454
Edgerly	..	..	..	..	....	14 384
Elm Grove	3	..	2	1	....	17,546
Evangeline	2	2	..	..	45	21,917
Haynesville	..	..	..	..	....	471,541
Homer	..	..	..	..	....	215,140
Lockport	2	..	..	2	....	14,911
Monroe	6	..	6	..	....	.....
Sarepta	1	..	1	..	....	.....
Shongaloo	3	..	3	..	....	.....
Vinton	4	3	..	1	150	183 086
Wildcats	10	..	..	10	....	.....
Totals	54	23	16	15	2,375	1,752,244

Arkansas

Field—	Completions	Producers	Gas Wells	Failures	Init. Prod.	Monthly Prod.
El Dorado	2	2	..	..	110	295,058
Irma	2	2	..	..	350	33,976
Smackover	74	66	1	7	6,745	2,881,047
Stephens Dist.	..	..	..	..	....	65,844
Wildcats	8	..	..	8	....	.....
Totals	86	70	1	15	7,205	3,275,925

Texas

N. Texas	191	125	..	66	19,968	2,576,400
Cent. and W. Texas	208	148	..	60	338,025	7,654,000
E. Texas	18	..	16	2	.....	.....
Gulf Coast	48	27	..	21	11,399	2,207,145
Misc.	11	11	..	..	5,078	1,586,179
Totals	476	311	16	149	374,470	14,023,724

Now in Midcontinent!

Photograph of J .A. Hull Company's Detmer No. 7, Winfield, Kansas, ten minutes after it was shot with 160 quarts of nitro and a

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—on January 3, 1925. Eleven hours' time was allowed, after shot and bomb were placed, to remove 18 joints of liner. The well cleaned itself in ten minutes.

Positive Advantages of Zero Hour Electric Bomb

All mechanism enclosed in 3¼x19 inch cast-iron shell, proof against water, magnetism and friction.
No outside wires to break or bridge.
No dangerous cleaning out on top of an unexploded shot.
No delay due to caving or broken circuit.
No danger from premature explosion.
No question about time of discharge—from one to eleven hours as predetermined.
No expensive delay in getting well on production.

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H. A. JENKINS, Midcontinent Representative, Tulsa, Okla.
Dial; 2-9612 P. O. Box 1278

NORTH TEXAS

Field—	Completions	Producers	Failures	Init. Prod.	Monthly Prod.
Archer County	115	81	34	11,760	1,131,095
Electra	19	12	7	488	539,060
Burburnett	1	1	..	20	446,215
So. Vernon-Wilbarger Co.	17	15	2	5,595	161,915
Young County	21	9	12	1,750	132,990
K-M-A and Iowa Park	8	5	3	355	112,715
Panhandle Dist.	1	..	1	....	37,540
Petrolia-Clay County	4	1	3	*	11,645
Montague County	3	1	2	†	1,455
Throckmorton County	1	..	1	....	995
Jack County	..	..	..	....	775
Wildcats	1	..	1	....	.....
Totals	191	125	66	19,968	2,576,400

*Includes 500,000 cu. ft. gas.
†Includes 22,000,000 cu. ft. gas.

CENTRAL AND WEST TEXAS

Field—	Completions	Producers	Failures	Init. Prod.	Monthly Prod.
Wortham	160	121	39	331,810	3,441,930
Corsicana-Powell	5	2	3	35	1,785,290
Mexia-Currie	..	..	..	....	688,790
Stephens County	8	3	5	2,675	478,395
Richland	5	..	5	....	380,680
Eastland Co.	10	10	..	760*	340,535
Reagan County	2	1	1	2,200	305,380
Moran-Shackelford County	1	1	..	60†	77,065
Mitchell County	3	2	1	260	54,065
Callahan County	3	2	1	75	47,865
Brown County	6	3	3	120	27,560
Strawn-Palo Pinto County	2	1	1	30	21,175
Coleman County	1	1	..	‡	2,170
Thrall-Williamson County	..	..	..	....	1,705
Scurry County	..	..	..	....	1,395
Wildcats	2	1	1	§	.....
Totals	208	148	60	338,025	7,654,000

*Includes 6,000,000 cu. ft. gas.
†Includes 10,000,000 cu. ft. gas.
‡Includes 500,000 cu. ft. gas.
§Includes 5,500,000 cu. ft. gas.

EAST TEXAS

Field—	Completions	Producers	Gas Wells	Failures	Init. Prod.	Monthly Prod.
Waskom Gas Field	12	..	11	1	.....	.....
Panola Gas Field	6	..	5	1	.....	.....
Totals	18	..	16	2	.....	.....

GULF COAST

Barbers Hill	..	..	..	..	....	2,793
Batson	1	..	..	1	....	49,228
Blue Ridge	..	..	..	..	....	10,522
Damon Md.	..	..	..	..	....	37,200
Dayton	..	..	..	..	....	1,113
Goose Creek	4	4	..	..	1,305	379,155
High Island	..	..	..	..	....	2,015
Hockley	..	..	..	..	....	.....
Hull	12	10	..	2	2,520	475,230
Humble	..	..	..	..	....	177,134
Markham	..	..	..	..	....	1,534
Nacogdoches	..	..	..	..	....	1,920
Orange	8	3	..	5	3,150	320,478
Jierce Junc.	3	2	..	1	3,500	34,627
Richmond	1	..	..	1	....	12,834
Saratoga	..	..	..	..	....	145,415
Spindle Top	..	..	..	..	...	33,263
South Liberty	2	1	..	1	700	11,277
Sour Lake	8	6	..	2	159	120,435
W. Columbia	4	1	..	3	65	390,972
Wildcats	5	..	..	5	....	.....
Totals	48	27	..	21	11,399	2,207,145

TEXAS MISCELLANEOUS

Luling	5	5	..	..	988	997,580
Mirando	6	6	..	..	4,090	418,874
Somerset	..	..	..	..	....	134,354
Misc. S. Tex.	..	..	..	..	....	35,371
Totals	11	11	..	..	5,078	1,586,179

Premiums Indicate Possible Further Advances

(Continued from page 21.)

its current production and will permit storing of but little oil. The contracts involve upwards of 15,000 barrels daily and are with Vacuum Oil, Atlantic Refining and others. It is understood that the contracts that Phillips holds are based on a price determined by the open market on day of delivery plus a commission charge and handling costs This crude, as in the past, will be moved to Gulf Coast tidewater in Phillips Petroleum tank cars.

With the refined oil market the country over reflecting the crude advances refining interests are as zealous as ever in protecting their crude supply and this factor undoubtedly will react to further intensify the offerings of crude in the open market and presages further advances in both raw and finished oils.

Sellers' Market

Sweeping price advances on crude and refined products during the past two weeks has created a firm sellers' market in the North Texas district, and the current demand for crude and refined oils has outgrown the available supply. Gasoline tank wagon prices in all sections of the country have advanced along with crude price quotations, thereby making it possible for refiners to boost their gasoline prices from 2 to 3 cents per gallon. Gasoline prices were gaining further strength during the fore part of this week, and the continued demand for this commodity from export and domestic buyers will probably enable the refiners to boost their quotations shortly in proportion to the new price of crude.

Higher crude prices have paved the way for a general resumption of drilling activities in proven and wildcat areas, and crude buying agencies for major companies and independent refiners are canvassing all fields in North and Central Texas for new connections, regardless of the size of the wells. New production is being encouraged in all the fields, and a cleanout campaign is being launched in old wells to bring up daily production while favorable crude prices are in effect. Numerous pipe line gathering system extensions are being planned by the major pipe line companies in North and Central Texas fields to increase their daily crude purchases. Magnolia is building 35 miles of line from the lower part of Wichita County to all the important fields in Archer County, and is also to erect two 55's on a pump station and tank farm site near the Harmel pool in Southwest Archer County. The Texas Pipe Line Company is building new gathering lines in the Moran-Callahan County shallow fields. Humble Pipe Line Company is reported to be buying right of way to build an 8-inch line from its Comyn pump station in the Ranger district to the Big Lake field in West Texas as soon as possible, while it is already at work in building the first unit of the Big Lake line as far as San Angelo, where the crude will be loaded in tank cars and transported to the Gulf Coast until the connecting link is completed to Comyn station.

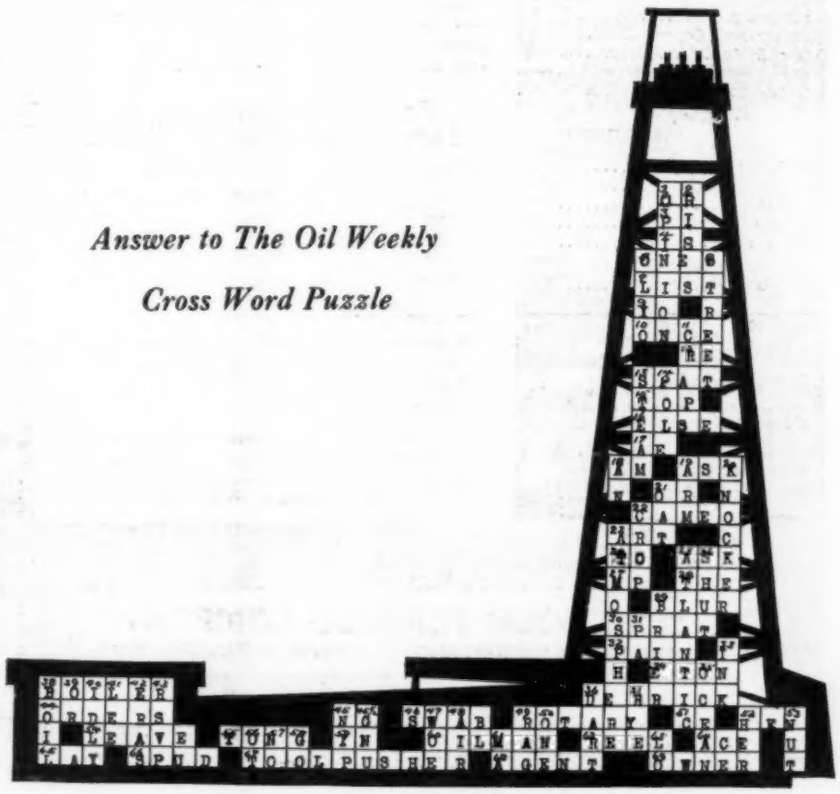
Premiums have been materially reduced since the posting of higher crude price quotations, and North Texas refiners are restricting their offers for spot crude to 15 and 35 cents per barrel above the recognized posted price. Prior to January 22 when the first advance was made in crude prices, premiums soared above 50 cents per barrel. Panhandle and American Refining companies have each announced a posted price on all grades of oil that amounts to a 15-cent boost above that offered by the major companies. These higher crude prices have reduced the margin of profit for refiners, and premiums will necessarily be held in check until refined products climb to a higher price level.

The Wortham field is no longer a factor in the Mid-Continent crude market, and daily production has declined to about 185,000 barrels with 176 completed oil wells. The short life of the flush production in this field caught many of the major pipe line companies overbuilt with carrier facilities in the field, and also caused a large amount of new steel storage to remain unfilled. The posting of a $1.70 price for crude produced at Wortham will not have any bearing on field developments, as lease owners were at work in drilling up every available location before the price advance. The gas pressure has been exhausted in most of the wells at Wortham and wells are being connected to pump, or placed on air as soon as possible to re-establish the flow channels in the Woodbine sand pay. The fluid level is averaging about 700 feet in wells at Wortham, while the fluid level in wells at Mexia stood considerably higher.

The passing of Wortham as a factor in the high gravity crude market has caused wildcat activity to be resumed on a larger scale in the East Central Texas fault region. A number of wildcats are now engaged in testing out favorable geological locations, with one wildcat threatening to make a commercial producer in the Kosse district. This well was drilled by C. W. Harrison and associates on the J. W. Preston lease, H. Anderson survey, in the east edge of Falls County, and is about two miles southwest of the famous short lived Kosse discovery well. Late last week both oil and gas began showing while drilling in the Edwards lime formation at 3618 feet, which is believed to be the same horizon that furnished oil production in the discovery well. Steel storage was erected at the well early this week, while 6⅝-inch casing was being lowered to the top of the lime and cemented Quick set cement will be used, and indications are that a test of the pay formation will be made before the close of the week. In the event the Preston test makes a producer a drilling rush will take place similar to the one just winding up at Wortham, as all nearby leases have been sold off in small tracts to companies that staged the big "shows" put on by Mexia, Corsicana-Powell and Wortham.

Answer to The Oil Weekly

Cross Word Puzzle



Average Daily Production For All U. S. Fields

Oklahoma

Fields—	Past Week	Prev. Week
Tonkawa	100,270	99,555
Burbank	58,305	58,985
Bristow	49 925	49,895
Gilcrease-Papoose	35,160	39,600
Osage (outside Burbank)	32,620	32,870
Cromwell	36,240	31 395
Okmulgee	24,390	24,750
Cushing	21,950	22,655
Hewitt	17,120	17,240
Healdton	11,725	11,740
Wewoka	11,915	11,215
Duncan and Walters	8 000	8,090
Otoe	8,415	7,430
Stroud	2,700	2 720
Braman	2,640	2,045
Other fields	61,995	62,590
Tota'a	486,370	482,685

Louisiana

Haynesville	14,865	14,855
Caddo Light	9,315	9,250
Cotton Valley	7,550	7,635
Homer	6 880	6,895
Vinton	5,700	5,625
Bull Bayou	4,550	4,550
Bellevue	4 010	3,970
Caddo Heavy	2,160	2,255
Evangeline	600	620
Elm Grove	600	590
Edgerly	460	465
Lockport (Lake Charles)	450	450
Anse La Butte	20	20
Totals	57,160	57,180

Kansas

Greenwood	22,310	22,210
Eldorado	16,130	16,120
Rainbow Bend	11,000	11,040
Elbing and Peabody	7 640	7,655
Fox-Bush	4,525	4 530
Augusta and Douglas	2,950	2,960
Blankenship	2,670	2,660
Florence and Covert	2,280	2,295
Other fields	20,215	20,195
Totals	89,720	89,665

Arkansas

Smackover Heavy	60 620	59,990
Smackover Light	32,705	31,880
El Dorado	9,690	9,660
Stephens	2,100	2,095
Irma	1,090	1 075
Totals	106,205	104,700

California

Los Angeles, Calif., Jan. 31.—The daily average production of the California fields the past week, compared with the previous week, with number of producing wells in several fields, was about as follows:

	Past Week	No. Prod. Wells	Prev. Week
Long Beach	121,500	512	123,000
Dominguez	55,000	43	57,000
Santa Fe Springs	51,000	341	51,000
Torrance	42,000	520	42 000
Huntington Beach	42,000	301	42,500
Rosecrans	8,900	19	9,000
Others	277,600		276 750
Totals	598,000		602,000

Mountain States

The following are the average daily pipe line runs for the past week from all the fields in the Rocky Mountain region, including Wyoming, Montana, Colorado and New Mexico. New Mexico pipe line runs are included for the first time in this report:

Fields—	Past Week	Prev. Week
Salt Creek	58,800	54,790
Lost Soldier	4,745	4,930
Cat Creek	3,800	3,115
Kevin-Sunburst	3,350	3,840
Rock River	3,300	3,200
Big Muddy	3,125	3,100
Teapot	2 180	1,785
Grass Creek	1 115	1,010
Craig	1,020	1,100
Artesia	1,000	950
Lance Creek	775	700
Elk Basin	760	585
Fort Collins	750	700
Hogback	480	500
Osage	355	360
Lander	250	300
Florence	240	225
Poison Spider	150	175
Ferris	125	110
Hamilton Dome	100	690
Rattlesnake	100	125
Greybull	65	60
Pilot Butte	40	35
Boulder	30	35
Miscellaneous	200	210
Totals	86 855	82,630

Texas

NORTH CENTRAL

Fields—	Past Week	Prev. Week
Wortham	82,500	132,000
Corsicana-Powell	56,685	56,930
Archer County	37,175	35 730
Mexia	19,000	19,725
Electra	17,500	17,420
Stephens County	15,600	15 915
Burkburnett	14,800	14,300
Reagan County	11,180	10,915
Eastland County	10,555	10,775
Richland	10,225	11,100
Young County	4 980	4,885
South Vernon	4,450	4,630
K-M-A and Iowa Park	3,680	3,650
Moran-Schakelford County	2 380	2,390
Currie	2,040	2,040
Callahan County	1,710	1,530
Mitchell County	1,655	1,715
Panhandle District	1,065	1,175
Brown County	815	865
Strawn-Palo Pinto County	710	690
Petrolia-Clay County	365	365
Montague County	85	110
Coleman County	65	65
Thrall-Williamson County	50	55
Scurry County	45	45
Throckmorton County	30	35
Jack County	25	25
Totals	299,370	349 080

GULF COAST

Fields—	Past Week	Prev. Week
Hull	15,500	15,050
West Columbia	12,850	12,460
Orange	8,800	9 040
Goose Creek	9,040	8,750
Humble	5,400	5,250
Sour Lake	3,875	3,725
Batson	1,525	1,530
Saratoga	1 510	1,525
Pierce Junction	990	1,500
Damon Mound	1,200	1,200
Spindle Top	935	975
Blue Ridge	660	625
Big Creek	500	560
South Liberty	350	350
Markham	90	90
Nacogdoches	30	30
High Island	60	60
Totals	63,315	62 720
Luling	30,700	30,970
Mirando	12,900	12,600
Somerset	4,300	4,200
Misc. South Texas	1,120	1,160
Totals	49,020	49,000
Totals Texas	411 705	460,800

Condensed U. S. Production for Twelve Months

(Stated in Barrels)

This table is carried each week by The OIL WEEKLY, and shows daily production average for each state or section. Figures for Oklahoma, Kansas, Texas, Louisiana, Arkansas and Mountain States are compiled by The OIL WEEKLY, while estimates for California and Eastern States are furnished by the American Petroleum Institute.

Daily average for month	*Mid-Continent	North Central Texas	Texas Coastal	Texas Total	Kansas	Okla.	Louisiana	Eastern States	Wyo. Mont. and Colo.	Calif.	Ark.	U. S. Total
January (1924)	685,540	243,120	75,085	334,485	67,815	374,605	59,125	108,000	144,735	698,965	114,255	1,900,985
February	729,933	254,180	81,131	362,849	68,183	407,568	59,449	104,500	141,775	675,425	114,726	1,934,476
March	762,684	284,874	78,567	388,221	69,864	407,946	55,783	97,800	128,352	650,790	119,869	1,917,023
April	777,590	276,595	76,755	380,005	71,015	429,980	54,740	101,250	127,700	649,825	128,750	1,943,270
May	763,320	267,475	74,175	374,915	71,490	424,355	60,655	103,800	127,770	640,930	148,630	1,952,545
June	799,230	260.785	74,335	375,310	74,265	464,175	62,660	105,750	125,735	628,400	157,165	1,993,465
July	815,830	254,665	75,445	378,365	81,545	479,620	63,855	107,175	124,305	620,175	148,655	2,003,695
August	861,640	254,520	75,700	377,045	85,765	521,355	62,595	107,000	123,895	619,200	142,740	2,037,890
September	886,650	253,243	76,953	366,197	86,758	546,647	62,162	107,622	117,345	611,500	131,343	2,029,580
October	855,823	247,222	75,713	359,861	86,884	521,717	62,493	106,600	107,270	605,060	123,235	1,972,902
November	851,733	248,467	71,648	369.621	86,031	517,237	66,117	106,375	91,205	594,000	119,893	1,950,478
December	873,344	267,065	65,437	385,410	88,065	518,213	59.602	106,875	83,472	606,875	111,402	1,959,917
January 3	876,690	299,490	66,355	415,365	86,630	490,570	55,740	107,200	73,600	605,000	106,895	1,938,670
January 10	908,035	343,635	68,775	463,210	87,345	477,055	55,565	106,300	69,275	603,000	109,175	1,970,925
January 17	949,175	379,945	64,165	493,430	88,595	480,635	56,965	106,000	81,075	605,000	104,530	2,016,230
January 24	921,430	349,080	62,720	460,800	89,665	482,685	57,180	106,000	81,360	602,000	104,700	1,984,390
January 31	875,460	299,370	63,315	411,705	89,720	486,370	57,160	105,500	86,855	598,000	106,205	1,941,545

*Includes North Central Texas, Kansas, Oklahoma.

NOTE—Wortham, Corsicana-Powell and Mexia production included in North Central Texas.

Salt Creek Producers Discuss Proposed Use of Vacuum System in Wyoming

Casper, Wyo., Feb. 2.—Fifty officials, representing practically every company operating in the Salt Creek field, met at Casper January 29 to discuss what effect the installation of the vacuum system would have on the future production of the field. This system is practically unknown in the Rocky Mountain fields, but the majority of the officials present were strongly opposed to such a process of producing oil. Officials of the Bureau of Mines were present, but they did not take sides with either those in favor of the system or those opposed to it. A committee was appointed to investigate how successfully the system had worked in other fields, whether the cost of installation was justified and the possible effect it would have on the life of a field.

Starting a month ago with almost equal flow of water and oil—about 100 barrels of each—the Midwest Refining Company's No. 1 well, located on section 36-37-82 in the North Casper Creek field, is now making about 100,000 barrels of water daily with the usual 100 barrels of oil. The water pressure is more than 175 pounds and drilling had to be suspended because the tools were unable to push their way down against such an enormous flow of water. The well now stands at a depth of 3307 feet. The first showing of oil was found at 3205 feet, where the well made both water and oil. At 3210 feet much more water was encountered with about the same amount of oil. As the bit went downward both oil and water increased until a depth of 3225 feet was reached. From that depth until the present standing of the well the water increased. So great is the flow of the water it is rumored that it may be pipel to Salt Creek or Casper. The flow is said to be sufficient to warrant a large irrigation project.

Other companies drilling deep tests in the the Salt Creek field have not been so fortunate as the Midwest interests, due to the fact that the latter company and its subsidiaries hold practically all the acreage in the heart of the field. The latest deep test is that of the Kinney-Coastal Oil Company, which is now drilling at slightly over 3800 feet on the northwest quarter of section 19-38-79. As in previous tests the Dakota and Lakota sands are the objective of the company. The geological conditions of the field and just how the deep sands on the outside of the field conform with the same sands in the center of the field have proven very interesting. Midwest interests reached the Lakota sand at about 2275 feet, the well being in the center of the field. The Kinney-Coastal well is located far from the center ofthe field and comparatively close to the outer edge, but has not reached the sand in question at 3800 feet, or more than 1500 feet deeper than the Midwest found it. Some of the other deep tests in the field have found water, proving the producing area of the Dakota and Lakota sands to be much smaller than some of the upper sands. As the demand for crude improves there is little doubt that Midwest and other interests will inaugurate an extensive drilling campaign for the oils found in these deeper sands.

The average daily production from each well in the Salt Creek field during December was about 40 barrels, compared with about 150 barrels for each well 15 months ago. This is due to the lack of gas pressure. There are about 1200 producing wells in the field and the average daily production is a little less than 60,000 barrels daily, or 10,000 barrels more than the field produced on an average during December. As the idle wells are connected to the pump the production gradually climbs, but a new peak for the field can not possibly be reached, no matter how intensive a drilling campaign is carried on, it is said.

The Leidecker Petroleum Company's

Imports of Petroleum at Principal United States Ports

The following represents the total imports of crude oil by months with the current month given by weeks:

	Atlantic Ports						Gulf Coast Ports					
	Baltimore	Boston	New York	Philadelphia	Others	Total	Galveston	N. Orleans Baton Rge.	Port Arthur Sabine Pass	Tampa	Total	Total at All Ports
October	365,000	292,000	1,194,000	536,000	816,000	3,203,000	988,000	1,330,000	380,000	50,000	2,248,000	5,951,000
November	223,000	395,000	1,194,000	576,000	757,000	3,145,000	1,478,000	1,000,000	551,000	111,000	3,287,000	5,432,000
December	474,000	574,000	1,243,000	606,000	1,024,000	3,917,000	2,019,000	1,832,000	933,000	259,000	5,043,000	8,960,000
January, 1924	398,000	531,000	1,060,000	376,000	949,000	3,314,000	1,295,000	887,000	689,000	15,000	2,936,000	6,250,000
February	520,000	527,000	639,000	458,000	771,000	2,865,000	1,558,000	1,284,000	525,000	195,000	3,562,000	6,427,000
March	802,000	734,000	1,243,000	502,000	1,668,000	5,049,000	2,346,000	1,689,000	1,116,000	301,000	5,257,000	10,281,000
April	653,000	664,000	1,371,000	407,000	1,067,000	4,162,000	1,641,000	1,492,000	510,000	68,000	3,711,000	7,873,000
May	693,000	618,000	1,368,000	264,000	1,329,000	4,272,000	1,398,000	1,308,000	884,000	169,000	3,759,000	8,031,000
June	515,000	466,000	1,864,000	292,000	1,026,000	4,163,000	1,769,000	1,079,000	685,000	145,000	3,678,000	7,841,000
July	375,000	260,000	1,971,000	179,000	1,114,000	3,899,000	1,418,000	1,211,000	579,000	153,000	3,361,000	7,260,000
August	463,000	400,000	1,958,000	468,000	788,000	3,945,000	1,857,000	1,210,000	547,000	80,000	3,694,000	7,639,000
September	437,000	193,000	828,000	330,000	878,000	2,666,000	1,090,000	1,350,000	605,000	87,000	3,132,000	5,798,000
October	606,000	299,000	1,140,000	402,000	546,000	2,993,000	1,027,000	1,190,000	492,000	130,000	2,839,000	5,832,000
November	851,000	375,000	2,047,000	709,000	1,108,000	5,090,000	1,695,000	1,631,000	404,000	85,000	3,815,000	8,905,000
December	733,000	113,000	1,192,000	396,000	1,002,000	3,436,000	976,000	1,589,000	338,000	228,000	3,131,000	6,567,000
January 3	80,000	.....	305,000	102,000	154,000	641,000	294,000	409,000	195,000	70,000	968,000	1,609,000
January 10	240,000	110,000	419,000	55,000	233,000	1,057,000	152,000	395,000	94,000	52,000	693,000	1,750,000
January 17	.....	165,000	527,000	.....	55,000	747,000	320,000	251,000	30,000	.....	601,000	1,348,000
January 24	117,000	110,000	445,000	.....	135,000	807,000	211,000	423,000	109,000	.....	743,000	1,550,000

NOTE—Figures by American Petroleum Institute.

Receipts of California Oil at Atlantic Coast Ports

The following shows the receipts of California oil at Atlantic Coast ports by months with the current month given by weeks:

	Atlantic Ports						Gulf Coast Ports					
	Baltimore	Boston	New York	Philadelphia	Others	Total	Galveston	N. Orleans Baton Rge.	Port Arthur Sabine Pass	Tampa	Total	Total at All Ports
October	779,000	224,000	2,503,000	779,000	429,000	4,714,000	.....	746,000	.....	.....	746,000	5,460,000
November	591,000	155,000	2,302,000	584,000	271,000	3,903,000	.....	935,000	.....	.....	935,000	4,838,000
December	454,000	215,000	2,901,000	813,000	753,000	5,136,000	.....	729,000	.....	.....	729,000	5,213,000
January	619,000	77,000	3,156,000	659,000	503,000	4,660,000	.....	615,000	.....	.....	615,000	5,275,000
February	326,000	145,000	2,811,000	842,000	75,000	4,199,000	.....	810,000	.....	.....	810,000	5,009,000
March	298,000	77,000	3,352,000	989,000	413,000	5,129,000	.....	.....	.....	.....	.....	5,129,000
April	170,000	77,000	2,633,000	378,000	224,000	3,482,000	.....	.....	.....	.....	.....	3,482,000
May	190,000	147,000	2,771,000	411,000	273,000	3,792,000	.....	315,000	.....	.....	315,000	4,107,000
June	522,000	147,000	2,490,000	443,000	220,000	3,822,000	.....	.....	.....	.....	.....	3,822,000
July	167,000	70,000	2,017,000	374,000	188,000	2,816,000	.....	75,000	.....	.....	75,000	2,891,000
August	400,000	.....	2,914,000	288,000	520,000	4,354,000	.....	30,000	.....	.....	30,000	4,384,000
September	290,000	148,000	2,737,000	327,000	81,000	3,583,000	.....	.....	.....	.....	.....	3,583,000
October	378,000	217,000	2,338,000	379,000	160,000	3,472,000	.....	.....	.....	.....	.....	3,472,000
November	512,000	223,000	1,676,000	163,000	160,000	2,734,000	.....	.....	.....	.....	.....	2,734,000
December	253,000	74,000	1,713,000	369,000	81,000	2,490,000	.....	93,000	.....	.....	.....	2,583,000
January 3	293,000	.....	262,000	27,000	80,000	662,000	.....	93,000	.....	.....	.....	755,000
January 10	60,000	.....	659,000	106,000	80,000	905,000	.....	.....	.....	.....	.....	905,000
January 17	75,000	70,000	280,000	.....	.....	425,000	.....	.....	.....	.....	.....	425,000
January 24	.....	.....	280,000	80,000	.....	360,000	.....	.....	.....	.....	.....	360,000

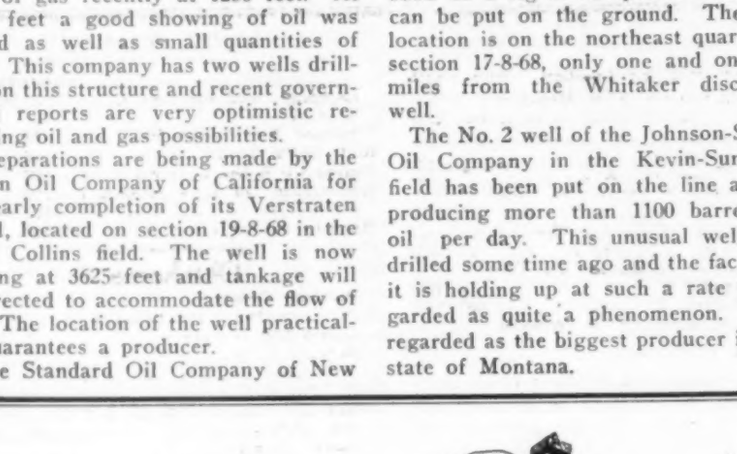
NOTE—Figures by American Petroleum Institute.

Gilmore No. 1, located in La Plata County, Colorado, section 3-32-12, encountered a flow of more than 1,000,000 feet of gas recently at 1250 feet. At 1550 feet a good showing of oil was found as well as small quantities of gas. This company has two wells drilling on this structure and recent government reports are very optimistic regarding oil and gas possibilities.

Preparations are being made by the Union Oil Company of California for the early completion of its Verstraten No. 1, located on section 19-8-68 in the Fort Collins field. The well is now drilling at 3625 feet and tankage will be erected to accommodate the flow of oil. The location of the well practically guarantees a producer.

The Standard Oil Company of New Jersey, through its subsidiary, the Carter Oil Company, will formally start operations in the Fort Collins field as soon as a rig is completed and tools can be put on the ground. The new location is on the northeast quarter of section 17-8-68, only one and one-half miles from the Whitaker discovery well.

The No. 2 well of the Johnson-Signal Oil Company in the Kevin-Sunburst field has been put on the line and is producing more than 1100 barrels of oil per day. This unusual well was drilled some time ago and the fact that it is holding up at such a rate is regarded as quite a phenomenon. It is regarded as the biggest producer in the state of Montana.



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The EMSCO derrick resists destruction from the elements—fire and rust. It is sturdily erected—double sway braced to 42 feet and strutted to the crown. Legs are cross and angle braced every seven feet from floor to top. For exceptionally heavy work, derrick is reinforced by 4¼ inch casing. Bull, Calf, Band Wheel and Sand Reel are all steel. Brake bands are asbestos lined. The floor is solidly cross-membered to prevent vibration, and is notched for rotary table.

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Stark & Spence Complete 75 Barrel Well in California

Calgary, Alta., Feb. 2.—The outstanding recent development in Canada has occurred in the Ontario fields, where a test drilled by the Stark & Spence Syndicate of Detroit on the old Ball farm near Fletcher is credited with an estimated flush production of 75 barrels. The well at present does not seem to be making that production, but it will undoubtedly do better when weather conditions improve and suitable flow lines are put in. Newspaper reports have given the depth as 3000 feet, but the production is actually from the Tilbury sand, around 1300 to 1400 feet, the test having, it is stated, been drilled less than a foot into the sand. The new producer is in the heart of the old Tilbury oil field, and about 300 feet east of old producing wells. Some additional drilling will be undertaken.

Outside this, practically no work is being done in the Ontario fields, though in Norfolk County the Dominion Natural Gas Company has No. 2 well shut down and No. 4 rigged up in the new gas field near Courtland.

In the Canadian West, the Royalite Oil Company gasser in the Turner Valley field has directed attention to the various oil areas unsuccessfully tested at the time of the Calgary boom in 1914. Leasing is reported in the Monarch and Dome areas. The Monarch field, west of Olds, was tested in 1914-15 by the Monarch Oil Company which drilled more than 4000 feet, finishing with a dry hole. This was the only test carried to any depth in the Monarch area. In the so-called "Dome field" the Dome Oil Company started a test which got some fair showings of oil but did not finish. Another supposed prospect is near Cochrane, where the Moose Mountain Oil Company got a showing of high grade oil which was lost when the well was shot.

In the Turner Valley field itself, the Royalite Oil Company will start another deep test in the spring. The McLeod Oil Company which got a fair showing of light oil at about 2400 feet, may deepen its test or finish at the present horizon and start another well. Outside these operations, no other new work is mooted.

In east central Alberta, the Irma-Wainwright field is still tied up by severe cold weather; but the spring will probably see five or six tests drilling in various parts of the field, though no further new work is likely to be undertaken till the reputed producers in this area are proven up under definite capacity tests.

In Southern Alberta, some shallow testing is being done by the Hutterite colonies. The Rockport colony near Magrath got a small flow at 325 feet which will be piped; and an additional well may be drilled. The Raymond colony has secured a drilling rig and will drill on the Miami farm near New Dayton in the spring.

Completions for Past Week in U. S. Fields

Texas

WORTHAM

Company, Well and Location	Initial Production Bbls.	Depth
Kirby Pet. Co. (Texas Co.) Wright 1 3 ac.	*	3165
Pure Oil Co. Crouch 2	*	2985
Crouch 3	*	2928
Simms Oil Co. Simmons 4	200	2975
E. L. Smith Oil Co. Keeling 1	*	2930
Southern Expl. Co. Wright 1	*	2975
Boyd Oil Co. Ferguson 4	1587	3017
Ferguson 6	360	3018
Humble O. & R. Co. Lindly 4 "B"	100	2990
E. C. Crouch 1	3600	3008
Republic Prod. Co. Allmond 2	400	3002
Wheelock & Collins Smith 2	2200	3003
Humble O. & R. Co. Ella Dodd 7	2500	3026
J. K. Hughes Crouch 12	600	3001
Simms Oil Co. Manning 4	250	3040
Sun Co. Simmons 6	600	3002
Simms Oil Co. Hackney 5	100	3010
Rio Bravo Oil Co. R/W 3	392	2999
Mrs. J. K. Hughes Simmons 3	300	2986
Humble O. & R. Co. R. G. Poindexter 1	700	3050
Boyd Oil Co. Smith 3 "B"	25	3020
Smith 9 "B"	2000	3015
J. K. Hughes Crouch 11	450	2997
Boyd Oil Co. Smith 10 "B"	2000	3010
Humble O. & R. Co. L. B. Poindexter 5	250	3012
Humble O. & R. Co. Simmons 1	800	2986
L. P. Hammond et al Hackney 1	*	3030
Hackney 2	*	3057
Magnolia Pet. Co. Boyd 16	500	3025
Boyd 17	500	3025

BURKBURNETT

Ross Oil Co. Waller 1	10	740
Staley-Ramming et al Ramming 6	10	1691

ELECTRA

Humble Oil Ref. Co. Burnett et al 4	*	1607
Magnolia Petroleum Co. W. T. Waggoner 8-A	*	2190
Waggoner Bros. 8	*	1940
Texhoma Oil & Ref. Co. Burnett et al 7	50	1819

K-M-A AND IOWA PARK

Magnolia Petroleum Co. J. A. Watkins 2	75	1763

EASTLAND COUNTY

Brothers et al Watson 1	*	3180
Knox-Lewis Oil Co. White 1	10	3560

STEPHENS COUNTY

Hart Oil Corp. Hart 6	*	3879
Lewis Oil Co. Brown 1, dd	25	4083
Magnolia Pet. Co. C. McCauley 5, dd	390	3954
Mid-Kansas Oil & Gas Co. Hill 3	100	3210
Texas Pacific Coal & Oil Co. W. J. Gardenshire 2	80	2079

YOUNG COUNTY

Burton et al E. M. Eichelberger 1	*	1208
Ed. S. Carey et al G. H. Roach 1	*	1502
Grisham et al W. D. Hall 1	*	1509
Humble Oil & Ref. Co. Campbell 1	*	1181
Jones et al James Marshall et al 1	*	1305
Knight-Hines et al S. Brooks 1	*	1002
Litchfield et al R. Campbell 2	*	1180
Murchison-Fain et al Ben Schlagel 1	200	1217
Nine Hundred Oil Co. S. M. J. Benson 5	20	889
Whitehead et al Belknap Coal Co. Fee 1	*	1510

ARCHER COUNTY

Roy I. Carter et al J. H. White 18-E	50	1610
Cline et al Turbeville-Cowan 1	*	1205
Daniels-Rutis et al Stampfli 1	200	1354
Electra-Gulf Oil Co. W. L. Andrews 1	*	1800
W. Franklin et al W. F. Parrish 2-B	125	1552
Fred B. Foster & Co. Andrews 1	†	385
Grisham & Parks et al C. L. Davis 7	70	1080
Gulf Production Co. E. S. Monahan 3	150	1294
E. S. Monahan 6	200	1300
T. L. Graffin 15	85	1305
W. M. Easterling 1-A	*	1512
Hobbs-Burleson & Chenault C. Lane 2	*	1470
Humble Oil & Ref. Co. J. A. Wood 3	*	1351
Oil Investment Co. Fee 2	40	1128
Murchison-Fain & Marland Oil Co. H. Harmel 7-B	25	1272
T. L. Griffin 12	100	1307
Norton-Golding et al C. E. Wilhelm 1	*	1450
Oil Investment Co. Fee 4	45	1200
Petroleum Producers Co. J. S. Bridwell 5	400	1140
E. A. Hausler 4	125	1143
E. A. Hausler 6	165	1135
E. A. Hausler 7	315	1148
Ray-Featherstone et al E. A. Hausler 11	60	1135
E. A. Hausler 13	180	1150
Roxana Petroleum Corp. J. H. Blewett 1	*	1470
Simms Oil Co. W. F. Parrish 5	90	1605
Underwood Drilling Co. L. F. Wilson 1	*	1703
A. T. Wolfe & Sons Chilson 1	110	1808

GULF COAST

Big Creek—		
The Texas Co.'s Fee No. 1	*	3500
Orange—		
Kishi Dev. Co.'s McGuire 45	*	3200
Gulf Prod. Co.'s Chesson 3 (wo)	*	4425
Chesson 2 (wo)	*	4625
Hull—		
Gulf Prod. Co.'s Phoenix Dev. Co. 45	150	3200
Republic Prod. Co.'s Dolbear 32 (wo)	60	2160
Gulf Prod. Co.'s Baldwin Fee 11	150	3050
Phoenix Dev. Co. 44	800	2800
Saratoga—		
Cotton Oil Co.'s Gulf 5	10	1310
Sour Lake—		
Humble O. & R. Co.'s Humble-West 38 (wo)	10	2825
West Columbia—		
Humble O. & R. Co.'s Pipkin & Lee 13	35	650
Batson—		
Gulf Prod. Co.'s Wing 161	10	650
Spindle Top—		
Gulf Prod. Co.'s Gladys 207 (wo)	*	1010

Houston Purchasers Elect Officers

Houston, Texas, Feb. 2.—B. B. Carter, assistant general manager of the Rice Hotel, was elected president of the Purchasing Agents Association of Houton Monday at the annual election of the association in the Rice Hotel. A. J. Williams and R. J. Loucks were chosen as vice presidents. Paul Reid of the Houston Oil Company was re-elected secretary and A. L. Burns of The OIL WEEKLY was elected treasurer. Two national directors were chosen, each having an alternate named. B. B. Carter and J. E. Nolan, retiring president, were elected with A. J. Williams and Paul Reid as alternates. Three local directors were named, F. G. De Yoe, purchasing agent of the Galena Signal Oil Company; L. D. Shaw of the Houston Car Wheel Company, and J. T. McClelland, purchaser of the Sinclair Companies. A dinner dance in honor of R. B. Carter will be given at 7:30 Monday in the Rice Hotel.

MISCELLANEOUS

Company, Well and Location	Initial Production Bbls.	Depth
Mirando—		
Kitselman & St. Albans No. 1	500	....
R. V. Hill's No. 1	2	....
Plateau Oil & Gas Co.'s No. 1	500	....
Witherspoon Oil Co.'s Holbein 1	300	....
No. 2	500	....
Magnolia Oil Co.'s No. 2	350	....

Oklahoma

Beckham County—		
J. R. Lyons' No. 1 Van Victor, C W L NW SW 24-8-22w	*	1327
Burbank Field—		
Mid-Kansas O. & G. Co.'s No. 8, C NW SE NW 26-27-5	60	2990
Texas Co.'s No. 3, C S L SE SW NW 18-27-6	150	2965
Carter County—		
Amerada Pet. Corp.'s Clay 3, C N½ SW NE 28-5s-1	60	1383
Skelly Oil Co.'s Simpson 2, C NE NE NW 25-2s-3w	95	3133
Creek County—		
Cameron et al's McDermott 1, C E L NE NW 9-16-9	*	3130
F. R. Billingslea's McIntosh 1-A, NWc NW SE 24-14-9	¶	1809
Grady County—		
Cotton Patch Oil Co.'s Wm. Moore 1, NEc SW NW 14-5-8w	¶	3180
Carter Oil Co.'s Dryden 1, C NE SW 2-4-8w	¶	1428
Greer County—		
Neal et al's Johnson 1, SEc NE NW 3-7-22w	*	1245
Hughes County—		
Slick's Grayson 2, C NE NW NE 3-9-9	1200	3326
Murray 4, C SE NE NE 3-9-9	1650	3314
Grayson 2, C NW SW NE 3-9-9	700	3336
Murray 3, C SW NE NE 3-9-9	1115	3359
Kay County—		
Marland Oil Co.'s Staber 1, SEc SE SW 1-26-2w	¶	2528
Hubbard 3, NEc NE NW 12-26-2w	¶	2534
McCullough 1, C N L SW 12-26-1w	890	3702
No. 2, NWc NW NE 12-26-2w	¶	2554
Comar Oil Co.'s McCormick 1, NWc NW SE 21-29-1w	1147	2068
Endicott 7-W, SWc NE SW 35-25-1w	123	4037
Blubaugh 8-W, NEc NE SW 2-25-1w	1437	4152
Texas Co.'s Gilbert 7, SEc SW SW 27-25-1w	2882	4130
Carter Oil Co.'s Stewart 13, SWc NW NW 35-25-1w	*	2510
Prairie O. & G. Co.'s Vanatta 1, SWc SW SE 1-26-2w	¶	2508
Love County—		
Hickey Creek Oil Co.'s Taylor 1, SEc NW NE 11-7s-2	*	2830
Noble County—		
Comar Oil Co.'s Carmichal 9-W, NEc NW NE 3-24-1w	963	4311
Mid-Co Pet. Co.'s Wilkins 1-A, NEc NE SE 30-24-1w	*	1543
Twin States Oil Co.'s Kinney 1, NWc NW NE 30-21-1w	*	2484
Spencer & Vickery's Burk 1, NEc NW NE 4-21-2w	*	1317
Okmulgee County—		
Superior Oil et al's Morey 3, C S L SW NE 34-16-12	200	2155
Price Oil Co.'s No. 4, SEc 25-24-8	*	2585
Osage County—		
Alexander-Shakely's No. 2, NWc 31-24-9	10	2157
Texas Co.'s No. 8, C E L NE NE 29-25-8	900	2687
No. 10, C N L NE 29-25-8	500	2712
Beacon Oil Co.'s No. 1, SEc SE NW 9-28-11	*	2130
Owen-Osage Oil Co.'s No. 311, C S L SW NW SW 30-28-11	*	1866
Gilliland Oil et al's No. 5, SWc NE SW 11-22-10	*	2327

Company, Well and Location	Initial Production Bbls.	Depth
T. O. Lillystrand's No. 2, C E½ SE SE 14-21-10	25	2435
Pawnee County—		
Galvez's Van Eman 6, SEc SE NE 17-20-7	300	2677
Folds & Newblock's No. 1, C SW SE NW 4-22-3	*	4232
Seminole County—		
Magnolia Pet. Co.'s Seran 5, C NW SW NE 33-8-8	*	3345
Cosden O. & G. Co.'s Toney 9, C SW NW SW 4-10-8	930	3439
Toney 10, C NW SW SW 4-10-8.	100	3433
Toney 14, C NW SE SW 4-10-8..	900	3489
Southwestern Pet. Co.'s Jackson 3, C NE SE NW 4-10-8	2400	3430
No. 6, Wisner, C NW SE NE 4-10-8	*	2839
Roxant Pet. Co.'s Brown 5, C NW NW SW 10-10-8	40	3520
Berryhill 3, C NW SE NW 10-10-8	80	3480
Berryman 3, C NW NE NW 10-10-8	84	3481
Carter Oil Co.'s Bunner 5, C SW NE SW 9-10-8	10	3456
Waite Phillips' Tiger 1, C SW NE NE 15-10-8	*	3600
Tiger 2, C NW NE NE 15-10-8..	*	960
Tiger 3, C SE NE NE 15-10-8....	*	550
Stephens County—		
Kawye Oil Co.'s Hine 4, NWc NW SW 25-1-9w	¶	1938
Magnolia Pet. Co.'s Banjo 1, SWc 14-1s-8w	¶	1593
Tulsa County—		
Sand Springs Home's Johnson 1, NEc SW NW 14-19-11	*	2710
Berryhill 1, C E L SE NW 5-19-12	1500	2098
Mays Brother et al's Hooks 3, SEc NW NW 34-19-14	*	1430
Thompson & Black's Bertholg 5, NEc NW NW 5-16-13	25	2170

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Company, Well and Location	Initial Production Bbls.	Depth
T. A. Creekmore's Gills 1, C SE SW NW 14-16-12	50	1895
Echo Oil Co.'s Grayson 3, C W L SW NE 5-19-12	10	2090
Mutual Oil Co.'s Partridge 4-A, SWc 5-19-12	5	2054

Kansas

Butler County—		
R. Ramsey et al's Meyers 2, C E L SE SW SW 27-28-5	15	2788
Chautauqua County—		
Gibsmith's No. 1, C NW NE 15-31-12	*	1978
Cowley County—		
Ashe et al's Starkey 1, NEc 16-30-4.	*	3316
Roxana Pet. Co.'s No. 1, C NE NW SE 9-33-3	*	1800
Marland Oil Co.'s Bowers 1, C SW SW NW 10-33-3	1250	3508
Waite Phillips' Johnson 5, C SW SW SE 20-33-3	2212	3253
Waite Phillips et al's Wertman 7, C NW NW NE 20-33-3	850	3212
Marland & Neeley's Rockwell 1, C SW SW NE 13-32-4	225	2547
Waite Phillips et al's Johnson 1, C NE NE SE 9-33-3	360	3508
Marion County—		
Lee-Ward Pet. Co.'s Riggs 1, NEc SE SW 31-20-4	*	2685
Montgomery County—		
Sharpless & Stark's No. 1, NWc NE NW 23-31-13	*	1683
Sumner County—		
Brady Brothers' Woods 1, C SW SW NE 25-33-2	*	3644

Wyoming

Salt Creek Field—		
Wyoming Associated No. 23-A, NW¼ 36-40-79	75	1785
Salt Creek Consolidated No. 15-A NW¼ 7-39-78	65	2191
Midwest Oil Co.'s No. 25, NE¼ 35-40-79	250	1220
No. 26-A, NE¼ 1-39-79	50	1967
Tisdale Dome—		
Midwest Ref. Co. No. 33-X NW¼ 28-41-81	*	2675

Louisiana

Cotton Valley District—		
Humble Oil & Ref. Co.'s Bodcau Lbr. B-8, 13-21-10	175	2519
Palmer Corp.'s Tillman 1, 28-21-10.	350	§2578
Total, 2 wells	525	

§Second test; formerly reported as a gasser at 2570 ft.

Elm Grove District—		
Palmer Corp.'s Hodges B-7, 30-16-11	¶6	1935
Sarepta District—		
Butler & McMurray's Wheeler 1, 35-23-11	¶50	2689

EAST TEXAS

Wafkom Gas Field—		
Fortuna Oil Co.'s Bryson 1, 8-17-16, Caddo Parish, La.	¶10	936
J. B. Greer's Abney 2, J. J. Blair Headright sur, Harrison County, Texas.	¶4	987
A. C. Scott et al's Vaughan 1, W. R. Anderson Headright sur, Harrison County, Texas	¶12	951
Total, 3 wells	¶26	
Panola County Gas Field—		
Magnolia P. Co.'s Tiller 1, J. Thorpe Headright sur	¶3	1114

Arkansas

Smackover Field, Ouachita County—		
Burton Trust's Hughes 3, 28-15-16..	20	2302
Gulf Ref. Co.'s Reynolds 2, 23-15-17	125	2325
Louis Werner A-7, 26-15-17.....	120	2312
Hunt et al's Haltom 1, 23-15-17....	40	2371
Magnolia Pet. Co.'s Smith 10, 31-15-16	45	2253
Staves et al's Heffers 4, 26-15-16...	15	2351
The Texas Co.'s Smith 7, 31-15-16..	60	2253
Smith 8, 31-15-16	40	2261
Smackover Field, Union County—		
Crawford & Sebastian's Giller 3, 14-16-15	*	1995
Federal Pet. Co.'s Childs 1, 9-16-16.	*	3075

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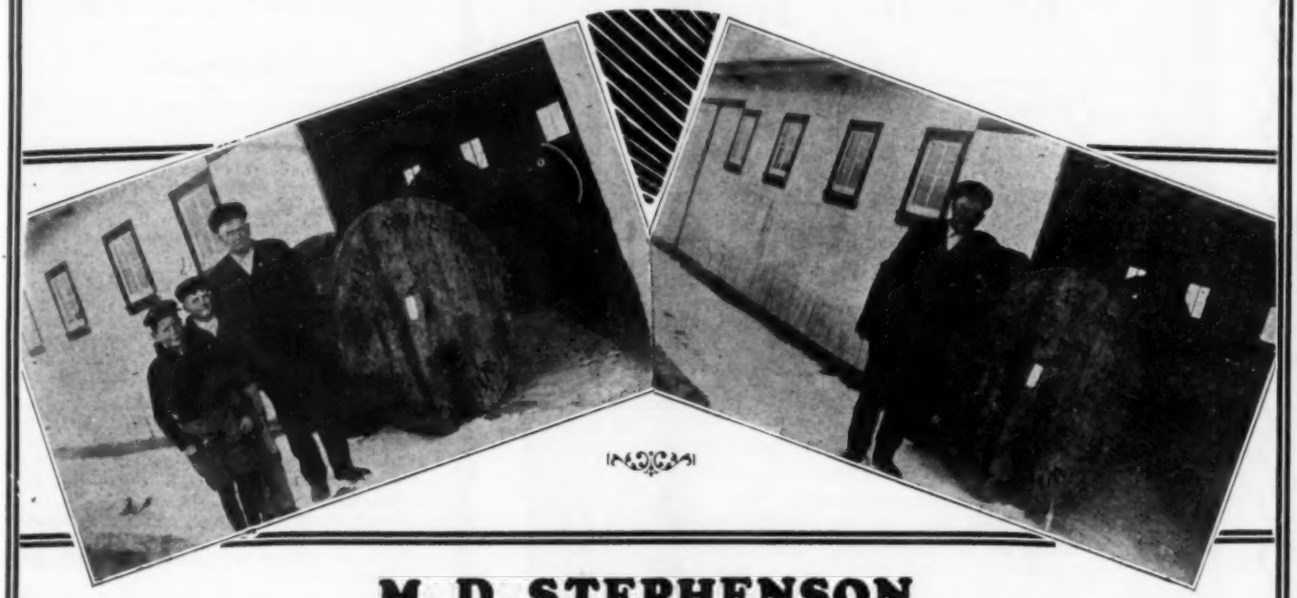

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Mildred	Cromwell	Bristow	Bartlesville	El Dorado	Lewistown	Electra

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The next best thing to having a Devil's Fishing Tool on hand when fishing jobs of certain classes come up is to get one as soon as it can be rushed to your job.

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The DEVIL'S STEEL HAND and the DEVIL'S PITCHFORK are the tools that are making new records every week in fishing out such articles as discs, rotary pipe slips, rock bits, cones, fishtail blades or bits, underreamer lugs, pieces of cable-tool bits, jumped bit pins and stem boxes. In many cases these tools snare their fish on the FIRST RUN. Write us for interesting further details.

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IMPROVED "VULCAN" DROP FORGED CHAIN PIPE WRENCH

With double ended reversible jaws, assuring the service of "two tools at the price of one."

Let us tell you about it—Literature?

J. H. WILLIAMS & CO.
"The Wrench People"
New York BUFFALO Chicago

Company, Well and Location	Initial Production Bbls.	Depth
Gulf Ref. Co.'s Johnette 1, 33-15-16.	15	2264
Harris et al's Cooke 1, 20-16-15....	*	2098
Hunt et al's Dumas 1, 23-16-16....	*	1850
Magnolia Pet. Co.'s Scott 1, 12-16-17	45	2253
Morris Drlg. Co.'s Flenniken 5, 6-16-15.	*	1990
Nykander et al's Dumas 1, 28-16-15.	*	1775
Page et al's Alphin A-1, 30-16-16..	*	2405
Rutledge et al's Meeks 3, 1-16-17..	20	2261
Simms Oil Co.'s Laney A-1, 8-16-16	80	2642
Wetherbee et al's Rice 3, 6-16-16..	75	2260
Total, 20 wells	700	

California

Rosecrans—		
Associated Oil Co.'s Brockley 1....	450	4929
Long Beach—		
Pan American's McKeon 2.....	70	4993
Federal Prod. Co. Lightburn 2 (wo)	300	4275
Acme Pet. Corp.'s Dameron 4 (wo)	150	4933
Huntington Beach—		
Standard's H. B. 21-A (wo).....	100	3875
H. B. 9-E	25	2728
H. B. 27-A	50	3199
Southern Calif. Dr. Co.'s Riggles 2 (wo)	250	2950
Dominguez—		
Shell Co.'s Manuel 2 1500		4258
Torrance—		
Standard's Marble Fee 33	100	3750
Pet. Securities' Kleinmeyer A-2....	90	3840
C. C. M. Oil Co.'s Del Amo 31....	135	2681
General Petroleum's Carson 5.....	35	3375
LeMohn Inv. Co.'s No. 3.....	100	3820
Superior Oil Co.'s No. 57.....	50	3800
Ventura—		
Associated Oil Co.'s Lloyd 9-A.....4555		5150
Santa Fe Springs—		
Petroleum Midway's Mattern 2-2 wo	200	3888
Midway—		
Southwest Pet.'s No. 1, Sec. 28-31-24	80	4991
Sunset—		
Atlas Oil Co.'s No. 1, Sec. 30-12-23.	500	3367
Wheeler Ridge—		
Standard's No. 14	170	2145
No. 15	150	4000
Midland Oilfields' No. 1, Sec. 22-11-20	*	4907
South Kern River—		
Marland's Cauley 2, Sec. 36-28-28...	100	2660

Eastern States

PENNSYLVANIA

Bradford Field—		
South Penn Oil Co. Pittinger 1.....	2	....
Kennedy Oil Co. Bingham 136, tract 52	2	....
Bingham 136, tract 53.....	2	....
D. L. Andrus & Co. Andrus 12.....	3	....
Camp Estate Bingham 1	2	....
C. W. Moore Moore 1.....	2	....
Burns Bros. Barse 1	2	....
H. Newell, Quintruple 1	2	....
J. H. Gibson Willett 1	2	....
M. E. Jones Fisher 1	2	....
S. A. George George 1	2	....
C. J. Mitchell Borden 1.....	2	....
E. M. Daley Loeb 1.....	2	....
A. J. Bucher Chambers 1	2	....
D. & B. Oil Co. Franchot 22.....	2	....
Butler County—		
Geibel Bros. Geibel 1	2	....
Washington County—		
Tague, Lutton & Co. A. J. Munce 1	*	....

NEW YORK

Allegany County—		
N. K. Wilson Childs 1.....	2	....
T. B. Love & Co. Devoe & Co. 1...	2	....
First Nat. Bank of Olean Duke 1...	2	....
Bartoo & Co. Bartoo 1.....	2	....
Lavens Estate Lavens 1.....	3	....
M. Casey & Co. Burroughs Nat. Bk. 1	2	....
M. E. Goodall Citizens Bank Wellsville 1	2	....
E. J. Atwood McAndrews 1.....	2	....
First Trust Co., Wellsville Hazeltine 1	2	....

WEST VIRGINIA

Company, Well and Location	Initial Production Bbls.	Depth
Gilmer County—		
Oakey Bell O. Co. W. A. Simmons 2	¶1	....
Pittsburg & W. Va. Gas Co. Okey Stainaker 1	¶1	....
Hope Nat. Gas. Co. Al Vanhorn 1..	¶2	....
Robt. Means 1	¶2½	....
McCall & Co. Bennett Heirs 4.....	¶3	....
Satterfield & Co. A. Miller 1.....	¶2	....
Britton Bros. Baptist Church Lot 1	¶2½	....
McCall Oil & Gas Co. D. M. Miller 3	¶2	....
Marion County—		
Owens Bottle Machine Co. C. Toothman 1	¶2	....
C. A. Snodgrass L. B. Martin 1....	5	....
Hope Nat. Gas Co. Emma Canaway 2	¶2	....
Conaway 1	¶2	....
R. F. Monroe & Co. A. M. Rowand 1	¶2¼	....
Ritchie County—		
Hope Nat. Gas Co. Margaret Baker 1	¶1	....
First Nat. Bank 1	¶1¼	....
Andrew Jordan 1	¶1½	....
Beren Oil Co. Lawson Hrs. 1.....	*	....
Taylor & Co. Thomas Doak 1.....	2	....
Doddridge County—		
Hope Nat. Gas Co. R. Robinson 1..	¶1	....
McCall Oil & Gas Co. B. Smith 2..	12	....
Clifton Oil & Gas Co. Flora Freeman 4	75	....
Kanawha County—		
United Fuel Gas Co. H. O. Withrow 1	¶1	....
L. & H. Harper 1	¶½	....
R. M. Ashley 1	¶3	....
Monongalia County—		
Owens Bottle Machine Co. D. Glasscock 1	¶2	....
Marshall Oil & Gas Co. M. Tennant 1	¶¼	....
Carnegie Nat. Gas Co. Rebecca Cowell 1	*	3407
Pleasants County—		
Buckley, Gallaher & Co. W. H. Holland 1	5	....
D. P. Carder Oil & Gas Co. W. H. Dennis 2	5	....
Wood County—		
George W. Stout & Co. Niechmeyer 1	3	....
Dollman & Kingsbury S. J. West 6.	4	....
Lewis County—		
L. F. & R. R. Horner M. Lawson 1	¶2½	....
Hope Nat. Gas Co. W. H. Frost 1..	5	....
Harrison County—		
Wolf Penn Oil & Gas Co. Rhoda Lyons 2	*	....
Camden Gas Co. Chas, Hester 1....	¶2½	....
Boone County—		
The Pure Oil Co. Lafollette & Co. 14	90	....
Calhoun County—		
Richter Oil Co. J. L. Elliott 1.....	2	....
Linco'n County—		
A. F. Marsh Marsh 1	¶½	....
Putnam County—		
W. C. Kingrey & Co. A. J. Henderson 1	¶½	....

KENTUCKY

Company, Well and Location	Initial Production Bbls.	Depth
Barren County—		
Lew J. Emery Jr. Sons Co. Greer 2	9	....
Fred Moore Bruton 3	6	497
Carter Oil Co. Gooden 4.....	8	....
Johnson-Magoffin Counties—		
Kentucky Counties Oil Co. Roark 4	15	....
Conley & Bailey Conley 15.....	5	....
Pet. Exploration Co. W. Flint 1....	*	1253
Allen County—		
Wynn, Love & Co. E. A. Ayres 16..	10	450
Work & Co. Douglas 1.....	*	304
White Plains Oil & Gas Co. Reeves-Richardson 1	*	306
Wayne County—		
Taylor & Kennedy James Stinson 1.	5	....
Beaver Pet. Co. T. C. Morrow 7....	*	700
Lawrence-Johnson Counties —		
Townsend & Garrison C. K. Dobyne 13	37	752
Hovis & Young W. E. Skaggs 2....	4	793

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Here's a tip: Write the Walter O'Bannon Co., Sole Distributors, 817 E. First St., Tulsa, Oklahoma.

Mr. O'Bannon will tell you what dealer in your territory handles it, and will send you some literature. He likes to answer questions about the Stewart Hook, because it's so good it's popular, and being popular it is profitable.

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Safety Standard up to 2000 ft. 2" Tubing Weight.....3075

Safety Special up to 3000 ft. 2" Tubing Weight.....3385

Weight

Eclipse Std. up to 2000 ft 2" Tubing Weight.....2785

Eclipse Special up to 3000 ft. 2" Tubing Weight.....3000

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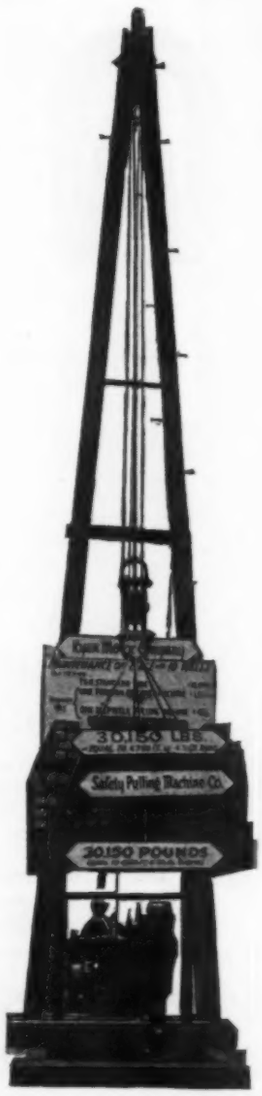
Wreckers also made to order, approximate weight 5000 lbs. One of our customers stated that he has pulled a weight equal to 100 tons with one of these machines.



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Mast 8x10x36 ft., Douglass Fir A-Style, Two Wheel Truck, two 16" Bronze bearing crown pulleys, 2½ Steel Pin mounted in malleable boxings. Large supporting plate 16" dia. between crown pulleys, eliminating any chance of bending pin.

Reel or Drum: 32 lb. 8¼ casing filled with concrete for winding drum, differentials banded with 3/16 band iron, brake surface 9"x40", choke brake style same as star drilling machine.

The whole reel assembly is mounted on 2¾ square steel shaft extending clear through reel, secured by three heavy castings.

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COMPANY OF CALIFORNIA

308 UNION OIL BLDG.
LOS ANGELES, CALIFORNIA

336 Humble Building, Houston, Texas

Company, Well and Location	Initial Production Bbls.	Depth
Rowan County—		
N. E. Kennard Kennard 1	¶5	342
McGuire & McDonald Morehead 1	¶5	410
Cumberland County—		
Vedder Oil Co. Doll Boles 1	10	....
Owensboro District—		
Kentucky Oil Co. A. Stewart 16	5	....
Warren County—		
Sine, Doak & Wiles, H. Shannon 4	*	500
TENNESSSEE		
Sumner County—		
Dr. T. A. Sims Stewart-Terrell 1	¶2	153
E. A. Oliver Oil Synd. Unknown 1	*	....
SOUTHEASTERN OHIO		
Washington County—		
Archer & Co. F. Schenkle 1	2	....
Earl Stephens & Co. C. O. Tratner 2	2	....
Palmer & Co. W. M. Schantz 2	2	....
Muskingum County—		
Mideast Oil Co. T. J. Headley 1	*	....
Carter Oil Co. R. H. Findley 2	*	....
Swingle Oil & Gas Co. Julia Ashton 1	2	....
Noble County—		
J. F. Haines & Co. E. O. Davis 1	5	....
Williams & Clark G. Williams 1	5	....
Morgan County—		
Monarch Oil & Gas Co. Congon 13	3	....
Monroe County—		
F. Hilliard & Co. Buchannan 2	*	....
CENTRAL OHIO		
Licking County—		
Carter Oil Co. James Settle 2	38	....
Adams & Moore T. L. Stevens 7	3	....
A. H. Heisey Gas Co. H. Haskill 1	*	....
Ohio Fuel Corp. Cummings lot 1	¶½	....
Medina County—		
Logan Gas Co. E. Brintnall 2	¶2	3100
Ohio Fuel Gas Co. H. Garman 1	¶½	2900
Wayne County—		
Ohio Fuel Gas Co. W. M. Smith 3	5	3250
Richland County—		
Berry & Hout G. A. Hout 1	4	1050
Holmes County—		
Carter Oil Co. J. E. Jackson 1	¶½	....
Fairfield County—		
Nypenno Oil Co. G. Everette 1	*	3100
Cuyahoga County—		
East Ohio Gas Co. J. Francis 1	*	2955
NORTHWESTERN OHIO		
Auglaize County—		
Neely-Clover Oil Co. J. Rapp 2	10	1305
Jack & Co. Grant Tester 1	10	1309
Fowler Bros. Pet. Co. G. Julian 3	15	1310
Fred Presser 1	28	1300
Cliff Blair & Co. Mary Tester 2	15	1307
Wood County—		
Ladd & Morrison Joseph Lane 3	3	1355
Scheidt, Huston & Co. H. Avery 1	15	1572
Gage & Bunnell Green 1	1	1810
Bart Perry J. Burkhalter 3	5	1386
Mercer County—		
Cent. West O. & G. Co. P. Schmidtz 5	10	1248
Kuhns & Co. Ricketts 3	15	1200
Shilling Interests J. Brunswick 1	2	1180
Hancock County—		
Rainey Oil Co. Rainey 11	15	1317
Dave Kirk & Co. E. Gorby 13	5	1300
Allen County—		
Carman, Botkins & Co. Younkman 5	50	1336
Hardin County—		
McGuffey O. & G. Co. McGuffey 1	5	1426
Paulding County—		
H. H. Cuppler & Co. J. Finan 1	¶2	1390
Van Wert County—		
J. H. Harmon & Co. E. L. Sheets 1	*	1220
INDIANA		
Sullivan County—		
Stensel & Co. I. G. Drake 1	*	908
ILLINOIS		
Wabash County—		
Hartman & Co. Frank Smith 1	*	1620
Whiteside & Co. H. Armstrong 2	15	1515
Coon Creek Oil Co. A. R. Biehl 4	40	1485
Clark County—		
Gillett Oil Corp. W. Slater 1	25	1437
Squires & Co. Snearley 12	5	571

Britain's Use of Petroleum Increased

Statistics to October show that imports of all classes of oil products have been heavier

Washington, D. C., Feb. 2.—The magnitude of the United Kingdom's petroleum trade and its dependence on foreign sources of supply are apparent when it is realized that during the first 10 months of the past year it paid out $156,698,000 for petroleum and petroleum products. The quantity imported in the 10 months was over a billion and a half American gallons.

These and many other interesting facts have just been disclosed in the following report received here from Consul Charles L. DeVault at London:

The exports in that period have amounted to 105,478,000 gallons valued at $12,080,000.

The re-exports have totalled only 57,850,500 gallons of the declared value of $10,575,000.

The crude oil imports during the first ten months of the year were over 438,000,000 gallons, 104,000,000 gallons more than in the corresponding period of last year, a gain of over 30 per cent. Compared with the first ten months of 1922 the gain was 105 per cent.

October Quiet

October, 1924, was an unusually quiet month. The total quantity of imports of petroleum and petroleum products was 20,000,000 gallons (American measure) less than the quantity imported in September last. Compared with October of last year, however, October, 1924, showed a gain of nearly 12,000,000 gallons, and a gain of 46,000,000 gallons over October of 1922. These imports during October, 1924, totalled 150,268,630 gallons of the declared c. i. f. value of $13,500,000. Of this quantity 54,805,620 gallons were of crude oil and 95,463,010 gallons of refined products.

Crude imports during October exceeded those of October of last year by 16,500,000 gallons, an increase of 43 per cent, and an increase of 90 per cent over October, 1922. They were, nevertheless, 800,000 gallons less than those of September last.

These greatly increased quantities of crude come largely from Persia. Over 37,139,000 gallons arrived from that source during October, 11,343,000 gallons from Curacao, and the remaining 6,000,000 gallons consisted of consignments from Texas ports and small shipments from New York City.

While the imports of crude petroleum have been growing thus enormously since the establishment of the large Anglo-Persian refineries at Llandarcy, Wales, and at Grangemouth, Scotland, the imports of several of the refined petroleum products have, in consequence, diminished. The exceptions are gasoline and fuel oil.

Gasoline Imports

Gasoline imports have, of course, continued to increase owing to the largely increased number of gasoline driven vehicles in use in this country. The official report of the licensing authorities shows that as of August 31, 1924, there were 1,266,416 motor vehicles in use in Great Britain, 495,579 of which were motorcycles. As of August 31, 1923, the number was 1,105,000, the twelve months showing an increase of over 160,000 gasoline-propelled vehicles. The increase since the beginning of the year 1920 amounts to a half million of such vehicles. As a result of the enlarged consumptive demand nearly 41,000,000 gallons of gasoline were imported during October, nearly 8,000,000 more than in October of last year, and 16,700,000 gallons more than in October, 1922.

During the first ten months of the year the gasoline imports exceeded those of the corresponding period of last year by over 96½ million gallons, and those of October, 1922, by 108½ million gallons.

The increase of consumption of fuel oil in commercial and naval vessels, in railroad locomotives, and in industrial plants has grown apace. During the twelve months ended July 1, 1924, forty-five vessels of 242,162 tons—27 per cent of the tonnage of new vessels—were fitted for oil burning. At the beginning of July, 1924, steamers of the aggregate tonnage of 17,154,072 tons were recorded as oil burners, comparing with 15,792,418 tons July 1, 1923, with 9,359,334 tons July 1, 1920, and with 1,310,209 tons July 1, 1914. A number of large business and office buildings in London have very recently installed oil burning heating plants. Of necessity the fuel imports have kept pace with the demand, the refineries in this country falling far short of meeting the requirements.

October's fuel oil imports amounted to more than 41,500,000 gallons, a gain of 6,000,000 gallons over October of last year, and 2½ times the quantity imported in October, 1922.

Fuel Oil Gains

For the ten months' period fuel oil imports totalled nearly 400,000,000 gallons, a gain of 24,000,000 gallons, or 8 per cent over October of last year, but 8,700,000 tons less than in October, 1922, when the Anglo-Persian refineries in Great Britain were not operating at anything like their present capacity.

Kerosene imports have rapidly declined for several years. October's imports of kerosene amounted to only 7,500,000 gallons, hardly more than one-half the quantity imported in October of last year, and only a little over one-third the quantity imported in October, 1922.

The kerosene imports for the ten months' period fell off 12 per cent, compared with the corresponding period of last year, and 25 per cent compared with the first ten months of 1922, in quantity. The total value of the kerosene imports of October, 1924, was only 45 per cent of that of October last year, and only 28 per cent of that of October, 1922.

Lubricating oil is now produced on a large scale in this country, but the imports still continue to be very large. During the first ten months of the year lubricating oil imports totalled over 96,000,000 gallons, an increase of nearly 10 per cent over the corresponding period of last year, and of nearly 40 per cent over the first ten months of 1922. During October of the present year the imports of lubricating oil were, by chance, extremely small, being much less than half the quantity imported in October of last year and not quite half the quantity imported during October of the year before.

Gas oil imports, which have for several years been fairly uniform, fell off enormously in October, amounting to only 2,144,000 gallons, considerably less than half the quantity imported in the corresponding months of 1922 and 1923.

Thus October, 1924, is seen to have been a weak month respecting imports of petroleum refined products, the total amounting to only 95,463,000 gallons as against 100,147,000 gallons in October of last year, and a monthly average of 110,855,000 tons for the last ten months. During the first ten months the imports of petroleum refined products as above totalled 1,108,558,000 gallons of the declared c. i. f. value of $128,679,873.

"All other sorts" exported totalled nearly 10,000,000 gallons, 1½ times the quantity exported during October of last year, but 40 per cent less than the quantity exported in October, 1922. The exports included in this group amounted to 10,547,815 gallons during the ten months' period, valued at $12,000,000.

Dr. Roy Morse, member of the faculty of the University of California, a well known geologist in the west, has become a member of the geological department of the Shell Company, and will make headquarters in Los Angeles. Dr. Morse at one time was a member of the geological department of the Standard of California.

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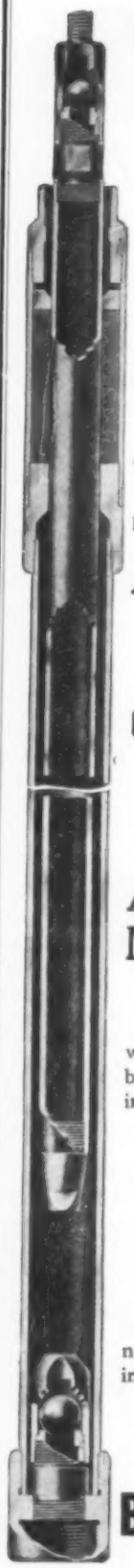

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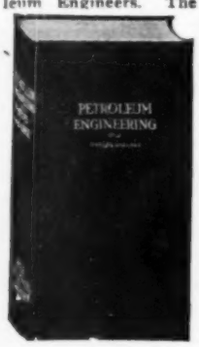

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KANSAS

Cowley County—Gypsy Oil Co.'s No. 8 Shannon, SWc SE NW 24-32-4 (twin to No. 4). Shawver et al's No. 1, Jarvis, NWc SW 35-32-5. Marland Oil Co.'s No. 6, Graham, NEc SE NE 9-33-3; No. 4, Wright, SEc NW NW 10-33-3; No. 4, Bower, NEc SW NW 10-33-3. Waite Phillips and Marland's No. 1, Nelson, SEc NE 19-33-3; No. 2, Ike Johnson, NEc SE 19-33-3; No. 3, Backus, SWc NW 20-33-3.

Woodson County—Lassen et al's No. 1 Black, SWc NE 14-24-14.

OKLAHOMA

Carter County—Noble-Gault, No. 2, Champion, C SE SE NE 28-1s-3w.

Creek County—Aztec Oil Co., No. 1-A Pray, SEc NW SE 14-17-8. Olean Pet. Co.'s No. 2, W. Yarhola, NEc SE SE 31-17-8; Olean No. 3, Washington, C SW NW SW 32-17-8. Phillips Pet. Co.'s No. 1, Micco, NEc SW NW 32-16-8. Cole et al's No. 1, Weaver, SE NE NE 4-18-11. Riverside Oil Co.'s No. 3, Bell, NE SW SW 19-17-8. Twin State Oil Co.'s No. 2, Brady, C SE SW NW 34-16-9. Tibben Oil & Gas Co.'s No. 7, Unallotted, C S L NW SE 30-15-9. Cosden O. & G. Co.'s No. 1, Marshall, NE NE SE 14-14-9. Joemack Oil Co.'s No. 1, Jones, NE NE SW 4-14-10. Cosden No. 1, Harry, NW SW SE 4-14-10. Wilcox O. & G. Co., No. 6, Kimble & Reading, C SW NE NE 20-14-10.

Garfield County—Sinclair O. & G. Co.'s No. 18, N. Walker, C E L SE NE NE 13-22-4w; No. 1, Burns, C NE SE 30-22-3w (old well deepened); No. 2 Burns, C NW NE SE 30-22-3w.

Hughes County—T. B. Slick et al's No. 1-A, I. Alexander, NE NE NW 2-9-9; Slick No. 5, Grayson, C SE NW SE 3-9-9. Cosden O. & G. Co.'s No. 11-W, Alexander, C NE NW NW 3-9-9; Cosden No. 12-W, Alexander, C NW NE NW 3-9-9. Phillips Pet. Co.'s No. 3, Caney Arbor, C SW NE SE 3-9-9. Foster Investment Co.'s No. 4 Tiger, C NW NW NE 3-9-9. Berry Pet. Co.'s No. 1, Alexander, (old well deepened) C SW NW 4-9-9. Superior & Furkman, No. 1, Toney Buck, SW SW SE 2-9-10. Gypsy Oil Co.'s No. 1, Archer, C SW SW NE 35-8-8.

Jefferson County—Carter Oil Co.'s No. 2, Seay, NEc SW SW 34-6s-5w.

Kay County—Texas Co.'s No. 3, Davis, C SE SW SW 27-25-1w; Texas No. 8, Davis, C SW SE SW 27-25-1w.

Lincoln County—Cosden O. & G. Co.'s No. 1, Bowers, SWc SW SW 13-15-6.

Okfuskee County—Wilcox O. & G. Co.'s No. 1, Simmer, SW SW SE 19-11-9. Jennings et al's No. 2, D. Barnett, C SE SE SW 33-10-9. Carter Oil Co.'s No. 6, Polly Johnson, C SW SW SE 33-10-9. Foster Investment Co.'s No. 1, L. Wallace, C SW SE NE 33-10-9.

Okmulgee County—Leasenburg's No. 3, S. Brown, SWc SE SE 29-14-15. Waite Phillips No. 1, Morton, SW SW NW 33-13-12.

Osage County—Sand Springs Home's No. 1, NW SE 15-21-9; No. 84, NW NE NW SE 24-21-9. Texas Co.'s No. 2, C N L SW 13-22-8. Red Banks Oil Co.'s No. 1, SEc SW 20-23-8, (old well deepened). Oliphant Peters' No. 5, NE SW NE NW 32-24-9. Carter Oil Co.'s No. 10, C SE NE NE 13-27-5.

Pawnee County—Magnolia Pet. Co.'s No. 1, C SW SW SW 27-23-3e. Amerada Pet. Corp.'s No. 1, Zoldoski, NEc SW SE 22-23-4. Magnolia's No. 1, Lesher, NWc NE NE 21-20-6.

Seminole County—Ramsey et al's No. 2, McGilsey, C SE SW SW 19-8-8; No. 2, John Bowlegs, C SE SW NW 31-8-8. Gypsy Oil Co.'s No. 7, J. Willis, C NW NE NE 9-10-8.

Stephens County—Zock et al's No. 1, Indian, C NW SW 30-2n-6w. Magnolia Pet. Co.'s No. 1, Harris, C NE NE NW 3-2n-5w. Clark & Cowden's No. 1, Simmett, SWc SW NE 9-1s-9w. Grump & Beard's No. 1, Cora Warner, NEc NE NE 22-1s-8w. Lone Star Gas Co.'s No. 5, Clarkston, C SW NW 30-1s-8w. Magnolia Petroleum Co.'s No. 1, Woodward, NEc NE NE 13-2s-8w.

Tulsa County—Mayo Bros.' No. 1, McIntosh, SW SW NW 2-18-14.

Waggoner County—W. A. Dodd's No. 3, T. Atkins, NEc SW SE 14-17-16. Young's No. 2, F. Charles, NEc NW NE 33-17-16.

LOUISIANA

Acadia Parish—Coastal Oil & Fuel Corp.'s Crowley Oil & Min. Co. 88, 48-9s-2w, 200 ft N and 120 ft E of SW Cor. of Sec.

Bossier Parish—The Palmer Corp.'s Hodges B-8, 23-16n-12w, 1980 ft S and 1320 ft W of NE Cor. of Sec.

Caddo Parish—Glassell & Myers', 927 Giddens-Lane Bldg., Shreveport, La., Florsheim 2, 9-17n-16w, 200 ft S and 595 ft E of NW Cor. NE¼ of NW¼. Dixie Oil Co.'s Dillon 65, 13-21n-15w, 1150 ft E and 760 ft S of NW Cor. of Sec. W. W. Dobson's Rives 2, 5-20n-16w, 330 ft S and 200 ft W of NE Cor. of Sec. J. P. Flournoy, Jr.'s Simpson 1, 8-16n-15w, 360 ft W and 360 ft S of NE Cor. of NE¼. The Texas Co.'s Russell 10, 3-20n-16w, 1120 ft N and 1120 ft E of SW Cor. of NW¼.

Iberia Parish—United Oil & Gas Synd.'s H. Landry 1, 64-13s-5e, 1683 ft along R. R. starting on line North of NE Cor. of Sec. 64 and 664 ft S of R. R.

Webster Parish—Moffitt & Murphy's Miller 1, 28-21n-10w, 685 ft E and 228 ft S of Center of SW¼ of Sec.

ARKANSAS

Ouachita County—Boyd & Bonham's Stringfellow 1, 28-15-16, old well to be deepened, 150 ft N and 500 ft W of SEc N½ SE¼ SW¼. Forrest Oil Co,'s Cramer 1, 27-15-16, 200 ft S and W of NEc NW¼. Gray et al's Myar 3, 32-15-16, 660 ft N and 500 ft W of SEc NE¼ NE¼. Gulf Ref. Co.'s Bennett 2, 32-15-15, 330 ft N and W of SEc NE¼; J. Goodwin A-4, 5-16-15, old well to be deepened, 513 ft S and 2440 ft E of NWc; Reynolds 3, 23-15-17, 660 ft N and 1120 ft E of SWc of Section; Werner 32, 32-15-16, 330 ft S and E of Center; Werner 33, 32-15-16, 1520 ft S and 865 ft W of NEc of Section; Werner A-8, 26-15-17, 1120 ft N and 2440 ft E of SWc; Werner A-9, 26-15-17, 1520 ft N and 1120 ft E of SWc of Section. Hunt et al's Green B-6, 23-15-17, center of south line NE¼ SW¼; Werner A-9, 26-15-17, 200 ft N and W of SEc SW¼ NW¼. Magnolia Pet. Co.'s Clawson 1, 35-15-17, 200 ft S and W of NEc NW¼ NE¼. Sun Co.'s Hardin 4, 27-15-16, 200 ft S and E of SWc E½ Lot 1, in NE¼. Whittiken et al's Anderson 5, 23-15-17, 200 ft S and E of NWc SW¼ SE¼.

Union County—Bradley & Carzort's Pate 1, 16-17-17, in NWc NE¼. Gulf Ref. Co.'s Howard 1, 13-16-17, 200 ft S and 1120 ft W of NEc; Johnette 2, 33-15-16, old well to be deepened, 200 ft N and W of Center; Werner 31, 5-16-16, 4620 ft N and 660 ft E of SWc.

TEXAS

Archer County—E. E. Clay's, Morgan Bldg., Wichita Falls, Texas, D. L. Bishop 1, 2401 TE&L sur, 150 ft to S and W lines. Andrade & Harvey's, Kemp Hotel, Wichita Falls, Texas, J. M. Kunkel 2, Hardway & McCoy sur, 150 ft to N and E lines. Humble Oil & Ref. Co.'s, Wichita Falls, Texas, E. A. Hausler 2, Thos. McCoy sur, 150 ft to N and E lines. J. Roy Dee's, Morgan Bldg., Wichita Falls, Texas, J. Sadan 1, G. W. Stall sur, 619 ft to E and 150 ft to S line. Oil Investment Co.'s, Staley Bldg., Wichita Falls, Texas, Fee 5, J. Richards sur, 159 ft to N and 150 ft to E line. Wirt Franklin's, Box 966, Ardmore, Okla., W. F. Parrish 3-B, H&TC Ry sur, 340 ft W No. 2. H. C. Donohoo's, 2011 Pearl St., Wichita Falls, Texas, G. F. Martin 1, E. Grooms sur, 1633 ft to W and 523 ft to S line. Magnolia Pet. Co.'s, Dallas, Texas, K. Rogers 2, 2407 TE&L sur, no lcn; 5, 2407 TE&L sur, no lcn; 6, 2407 TE&L sur, no lcn. P. F. Gwynn's, Wichita Falls, Texas, J. F. Rogers 1, 2407 TE&L sur, no lcn; 2, 2407 TE&L sur, no lcn. E. M. Jones', Wichita Falls, Texas, K. Rogers 1, 2407 TE&L sur, 150 ft to S and W lines. F. L. Driskill's, Baird, Texas, Mrs. H. Jobe 1, (Callahan County). Mutual Oil Co.'s, Fort Worth, Texas, H. Harmel 6, 2401 TE&L sur, 315 ft S No. 5. Bridwell, Heydrick & Palmer's, Wichita Falls, Texas, C. Boren 1, R. Newman sur, 150 ft to N and W lines. Roy I. Carter's, City Nat. Bank Bldg., Wichita Falls, Texas, J. H. White 19, Amer Trib sur, 300 ft S No. 17; 5-C, Amer Trib sur, 340 ft E No. 1. Holman, Cook & McElreath's City Nat. Bank Bldg., Wichita Falls, Texas, R. Campbell 1, W. E. Probert sur, 150 ft to N and E lines. Davis-Hart Co.'s, Staley Bldg., Wichita Falls, Texas, Roach & Junker 6, 1594 TE&L sur, 150 ft to N and E lines. Freeman-Hampton Oil Corp.'s, Wichita Falls, Texas, W. P. Ferguson 18, S. P. Ry sur, 450 ft to E and 750 ft to S line. Roxana Pet. Corp.'s, South Bend, Texas, J. M. Kunkel 6, Thos. McCoy sur, 150 ft to E and 450 ft to S line. Murchison, Fain & Golding's, Wichita Falls, Texas, H. Harmel C-7, 2401 TE&L sur, 776 ft to S and 150 ft to E line; T. L. Griffin 13, 2400 TE&L sur, 150 ft to W and 490 ft to N line; 14, 2400 TE&L sur, 300 ft to E and 300 ft NW No. 2; 12, 2400 TE&L sur, 580 ft to S and 450 ft to W line;; H. Harmel C-6, 2401 TE&L sur, 776 ft to N and 150 ft to E line;

Weekly Comparison of New Wells

Following is a condensed table giving a comparison of permits or locations made for new wells in Kansas, Oklahoma, Arkansas, Louisiana, Texas and California:

	Number of Wells for Week Ending															
	Oct. 17	Oct. 24	Nov. 1	Nov. 8	Nov. 15	Nov. 22	Nov. 29	Dec. 6	Dec. 13	Dec. 20	Dec. 27	Jan. 3	Jan. 9	Jan. 16	Jan. 23	Jan. 30
Kansas	16	12	30	38	23	36	33	44	12	22	15	..	4	28	20	9
Oklahoma . .	32	47	53	77	61	56	53	68	54	62	37	32	23	43	56	56
Arkansas . .	16	14	12	9	17	16	16	13	21	21	15	12	11	21	20	19
Louisiana . .	9	5	19	11	10	11	23	14	11	..	13	8	13	19	4	9
Texas	107	129	103	111	150	111	156	100	146	281	165	...	64	166	117	158
California . .	22	17	20	23	17	16	14	21	19	26	25	13	19	19	18	10
Total	202	224	237	269	278	246	295	260	263	412	270	134	134	296	235	261

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B-6, 2401 TE&L sur, 300 ft NE No. 2; B-7, 2401 TE&L sur, 150 ft to S and 1376 ft to W line; B-8, 2401 TE&L sur, 300 ft NE No. 1; A-3, 2401 TE&L sur, 300 ft SE No. 2; G. A. Lauster A-1, BBB&C Ry sur, 150 ft to S and E lines. Murchison & Fain's, Wichita Falls, Texas, T. L. Griffin A-3, 2400 TE&L sur, 300 ft N No. 1; A-4, 2400 TE&L sur, no lcn. Gulf Production Co.'s, Ft. Worth, Texas, J. F. Rogers B-1, 2407 TE&L sur, 150 ft to S and E lines; A. P. Nichols 4, Amer Trib sur, 150 ft W No. 1.

Atascosa County—Rio Bravo Oil Co.'s, S. P. Bldg., Houston, Texas, Cortinas 2, 200 ft E No. 1.

Baylor County—Sheldon & Richards', Megargel, Texas, W. B. Mills 1, 2428 TE&L sur, 150 ft to N and W lines. Monroe Production Co.'s, Graham, Texas, Wallace 1, T&NO Ry sur, 2490 ft to E and 1980 ft to S line.

Bexar County—Good Oil Co.'s, 118 San Pedro, San Antonio, Texas, W. Cantu 2, J. M. Arocha sur, N of No. 1.

Brazoria County—Gulf Prod. Co.,'s-Houston, Texas, C. A. Gavin 1, Jas. Cummings sur, 1470 ft to N and 1665 ft to E line.

Brown County—New Era Oil Synd.'s, Stephenville, Texas, W. A. Prater 2, W. B. Travis sur, 350 ft N No. 1. Moore & Wilson's, Cross Plains, Texas, L. Weterman 1, N. B. Mitchell sur, 200 ft to W and 150 ft to S line.

Callahan County—Kennedy & Higgs', Box 177, Cisco, Texas, R. L. Buchanan 1, Bayland Asy sur, 166 ft to E and 460 ft to S line; 2, Bayland Asy sur, 612 ft N No. 1. Jones & Keyes', Moran, Texas, J. H. Wagley 1, 2998 TE&L sur, 150 ft to N and W lines. Moutray Oil Co.'s, Cisco, Texas, W. M. Isenhour 1, Bayland Asy sur, center. Geo. W. Nickel et al's, Putnam, Texas. S. M. Davis 10, Bayland Asy sur, 300 ft E No. 8. A. R. Profer's, 1212 West Walker, Breckenridge, Texas, W. M. Isenhour 1, Bayland Asy sur, 165 ft to N and 150 ft to E line. F. L. Driskill's, Baird, Texas. Mrs. H. Jobe 1, Bayland Asy sur, 1000 ft to E and 600 ft to S line. Leach & Cockrell's, Baird, Texas, D. F. Harp 1, Bayland Asy sur, 750 ft to N and 450 ft to E line. Shade & Whitaker's, Moran, Texas, W. R. Jackson 6, D&D Asy sur, 300 ft N No. 5; 7, D&D Asy sur, 300 ft W No. 5. Shackleford Oil Co.'s, Putnam, Texas, M. Thomason 1, 2270 TE&L sur. 150 ft to S and E lines. L. A. Warren's, Box 272, Cisco, Texas, Mrs. J. T. Davis 1, Bayland Asy sur, 150 ft to S and 768 ft to E line; 2, Bayland Asy sur, 318 ft E No. 1. Godley Oil & Gas Co.'s, Henrietta, Texas, R. L. Buchanan 7, Bayland Asy sur, 150 ft to N and 360 ft to W line; C. B. Kennedy 4, Bayland Asy sur, 300 ft E No. 1. B. A. Duffy's, Putnam, Texas, J. T. Davis 9, Bayland Asy sur, 160 ft to S and E lines. G. B. Chandler's, Moran, Texas, D. E. Park 6, 2972 TE&L sur, 450 ft to N and 150 ft to E line. W. R. Andrews et al's, Putnam, Texas, Mrs. R. D. Williams 24, 2974 TE&L sur, 300 ft W No. 23. L. D. Prewitt's, Grace Hotel, Abilene, Texas, E. A. Lincecum 1, G. W. Denton sur, 300 ft to N and 450 ft to E line.

Chambers County—Texas Co.'s, Houston, Texas, A. Fisher 1, H. Griffith sur, 630 ft to E and 1130 ft to S line.

Caldwell County—United North & South Oil Co.'s, Luling, Texas, O. F. Stair 7, Jno. Henry sur, 600 ft N No. 4; H. S. Trammel 10, N. Reaville sur, 324 ft E No. 8; 11, N. Reaville sur, 324 ft E No. 10.

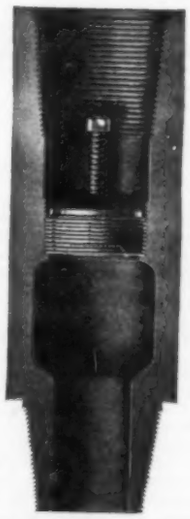
Eastland County—Magnolia Pet. Co.'s Dallas, Texas, O. Harris 8, M. Finch sur, 150 ft to W and 72 ft S to road.

Freestone County—J. K. Hughes Dev. Co.'s, Mexia, Texas, E. D. Crouch 14, R. B. Longbotham sur, 300 ft E No. 2; 15, R. B. Longbotham sur, 300 ft E No. 14; 8, R. B. Longbotham sur, 318 ft to N and 136 ft to E line. Simms Oil Co.'s, Dallas, Texas, H. C. Hackney 6, Wortham sur, 150 ft to N and 359 ft to W line; J. C. Rogers 2, Wortham sur, NW cor. Cranfill Bros. Oil Co. & Murchison & Fain's, Magnolia Bldg., Dallas, Texas, Roy Simmons 2, R. B. Longbotham sur, 185 ft N No. 1. Farrish, Watts, Collins & Crosby's, Humble Bldg., Houston, Texas, J. P. Jackson 3, Wortham sur, no lcn. Kirby Pet. Co.'s, Houston, Texas, S. T. Bounds 4, R. B. Longbotham sur, 260 ft W No. 1. Pure Oil Co.'s, Mexia, Texas, S. T. Bounds 6, R. B. Longbotham sur, no lcn; 7, R. B. Longbotham sur, no lcn. Boyd Oil Co.'s, Kirby Bldg., Dallas, Texas, Roy Simmons 7, R. B. Longbotham sur, no lcn. Humble Oil & Ref. Co.'s, Houston, Texas, T. B. Poindexter 5, R. B. Longbotham sur, 210 ft SW No. 4. Why Not Oil Co.'s (Mrs. J. K. Hughes), Mexia, Texas, Roy Simmons 5, R. B. Longbotham sur, 238 ft NE No. 3. A. E. Humphreys', Mexia, Texas, Young-McCorkle 3, Wm. Richie sur, 150 ft to N and E lines; 1, Wm. Richie sur, 150 ft to N and W lines; 5, Wm. Richie sur, 150 ft to S and W lines. Republic Production Co.'s, Houston, Texas, J. W. Allman 6, Kosse Subdiv., 282 ft to W and 67 ft to N line. Sun Oil Co.'s, Amer. Exchange Nat. Bank Bldg., Dallas, Texas, Mrs. Manning 1, S. McAnulty sur, 151 ft to N and W lines. R. L. Brookins', Amer. Nat. Bank Bldg., Dallas, Texas, D. Bays 1, R. B. Longbotham sur, 150 ft to S and E lines.

Fort Bend County—Gulf Prod. Co.'s, Houston, Texas, B. Blakely 10, Blk. E. E. Drew sur, 238 ft to N and 312 ft to W line.

Harris County—S. A. Weed et al's, Humble, Texas, Conway 3, Jas. Strange sur, West cen-

BAKER



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tral. Carter & Davis', Scanlan Bldg., Houston, Texas, C. M. Malone 2, Sec. 4, H&TC Ry sur, 135 ft to E line. Ellwood Co.'s, Box 373, Humble, Texas, Mason 1, Jas. Strange sur, 50 ft to N and 100 ft to W line.

Galveston County—Sun Oil Co.'s, Beaumont, Texas, J. W. Lockhart 2, M. Dunman sur, 100 ft S No. 1.

Harrison County—H. C. Morris', Bastrop, La., S. Moore 1, R. W. Bedford sur, 250 ft to N and 410 ft to E line. Jno. Woodley's, Giddens-Lane Bldg., Shreveport, La., C. M. Abney 1, Jas. Steele sur, 200 ft to N and 300 ft to E line. Waterman Drilling & Dev. Co.'s, Waskom, Texas, C. M. Abney 1, J. J. Blair sur, 660 ft to N tnd W lines. Roy Jenkins', Amer. Nat. Bank Bldg., Dallas, Texas, T. J. Taylor 1, C. Fuller sur, center. Ben Sadovnick's, 865 Travis Ave., Shreveport, La., L. Jones 1, J. Lipscomb sur, 104 ft to N and 204 ft to E line. Fuller Oil Corp.'s, Slattery Bldg., Shreveport, La., M. G. Armstrong 1, L. P. Alford sur, 300 ft to S and E lines.

Hardin County—Gulf Prod. Co.'s, Houston, Texas, BBB&C Ry 23, BBB&C Ry sur, 50 ft to S and 434 ft to W line.

Hunt County—Gulf Prod. Co.'s, Houston, Texas, W. B. Bryan 1, Jas. Cole sur, 853 ft to W and 150 ft to N line.

Hutchinson County—J. H. Middleton's, Collinsville, Okla., J. F. Weatherby 1, Sec. 18, B. Y. M. & C. Ry sur, 380 ft to W in center of line.

Jefferson County—Ellis & Lancaster's, Guffey, Texas, B. Lawrence 1, J. A. Veatch, center. W. S. Oldham's, 847 Euclid Ave., Beaumont, Texas, Fee 1, J. A. Veatch sur, center.

Jim Hogg County—Humible Oil & Ref. Co.'s, Houston, Texas, East 5, Las Moritas sur, 16,666 ft to E and 833 ft to S line.

Liberty County—Mills Bennett's, Second Nat. Bank Bldg., Houston, Texas, E. W. Pickett 1-B, M. G. White sur, 296 ft to W and 18 ft to S line. Gulf Production Co.'s, Houston, Texas, M. Van de Venter 1, M. G. White sur, 1388 vs to E and 51 vs to N line. R. L. Young, Box 1788, Houston, Texas, S. Chambers 1, M. G. White sur, 280 ft to W and 50 ft to S line. Hoffer Oil Corp.'s, Box 1001, Fort Worth, Texas, Smith-Pickett 1, M. G. White sur, 41 ft to N and 150 ft to W line. Texas Co.'s, Houston, Texas, Fee 1, J. Devore sur, 280 ft to N and 100 ft to E line. Mrs. Neils Esperson's, Second Nat. Bank Bldg., Houston, Texas, Sip Baldwin 1, M. G. White sur, no lcn. Vacuum Oil Co.'s, Gulf Bldg., Houston, Texas, A. Barrett 1, M. G. White sur, NE cor.

Live Oak County—Houston Oil Co.'s, Houston, Texas, H. Cartwright 8, F. Botillo sur, 4400 ft to S and 700 ft W of No. 6.

Milam County—Fogle Oil Co.'s, Minerva, Texas, G. W. White 1, A. F. Burchard sur, 150 ft to N and W lines.

Navarro County—Halmark Oil Co. & Derby Oil Co.'s Amer. Nat. Bank Bldg., Dallas, Texas, Harvard 8, J. D. Matthews sur, 150 ft to S and W lines. B. E. Strotman et al's, Box 136, Currie, Texas, E. Bounds 1, M. Boren sur, 150 ft to S and W lines. Magnolia Petroleum Co.'s, Dallas, Texas, I. T. Kent 31, Jas. Smith sur, no lcn.

Orange County—Gulf Prod. Co.'s, Houston, Texas, Kishi-Lang 9, Jas. Dyson sur, 800 ft to S and 600 ft to E line; Hager-Moore 4, Wm. Dyson sur, 50 ft to N and E lines.

Panola County—J. C. McCormick's, Box 96, Marshall, Texas, J. C. Shahan 3, Jas. Asher sur, 250 ft to E and 1300 ft to S line. J. H. Askew's, 455 East College Ave., Shreveport, La., G. C. Tiller 2, Mathews & Mitcheson sur, 800 ft to W and 200 ft to S line. Industrial Gas Co.'s, Marshall, Texas, First Nat. Bank 2, Jas. Asher sur, 800 ft to W and 450 ft to S line. Magnolia Petroleum Co.'s, Dallas, Texas, W. R. Hudson 2, W. H. Lacy sur, 300 ft to S and E lines.

Pecos County—Gulf Prod. Co.'s, Houston, Texas, White-Baker 1, GC&SF Ry sur, 1650 ft to N and 330 ft to E line.

Shackelford County—Chas. Steele's, Box 711, Moran, Texas, T. T. Brooks 4, Univ Lands sur, 150 ft S No. 6; 5, Univ. Lands sur, 150 ft W No. 6; 6, Univ. Lands sur, 150 ft SE No. 3. S. M. Hickey et al's, Cisco, Texas, J. W. Littlefield 5, Insane Asy sur, south of No. 1; 6, Insane Asy sur, south of No. 4. Hart, Benton & Whittington's, Ft. Worth, Texas, J. C. Gordan 1, Insane Asy sur, 150 ft to N and W lines. Dr. Chas. Wm. Wallace's, Wichita Falls, Texas, G. E. Waters 2, Univ. Lands sur, 150 ft to N and 485 ft to W line.

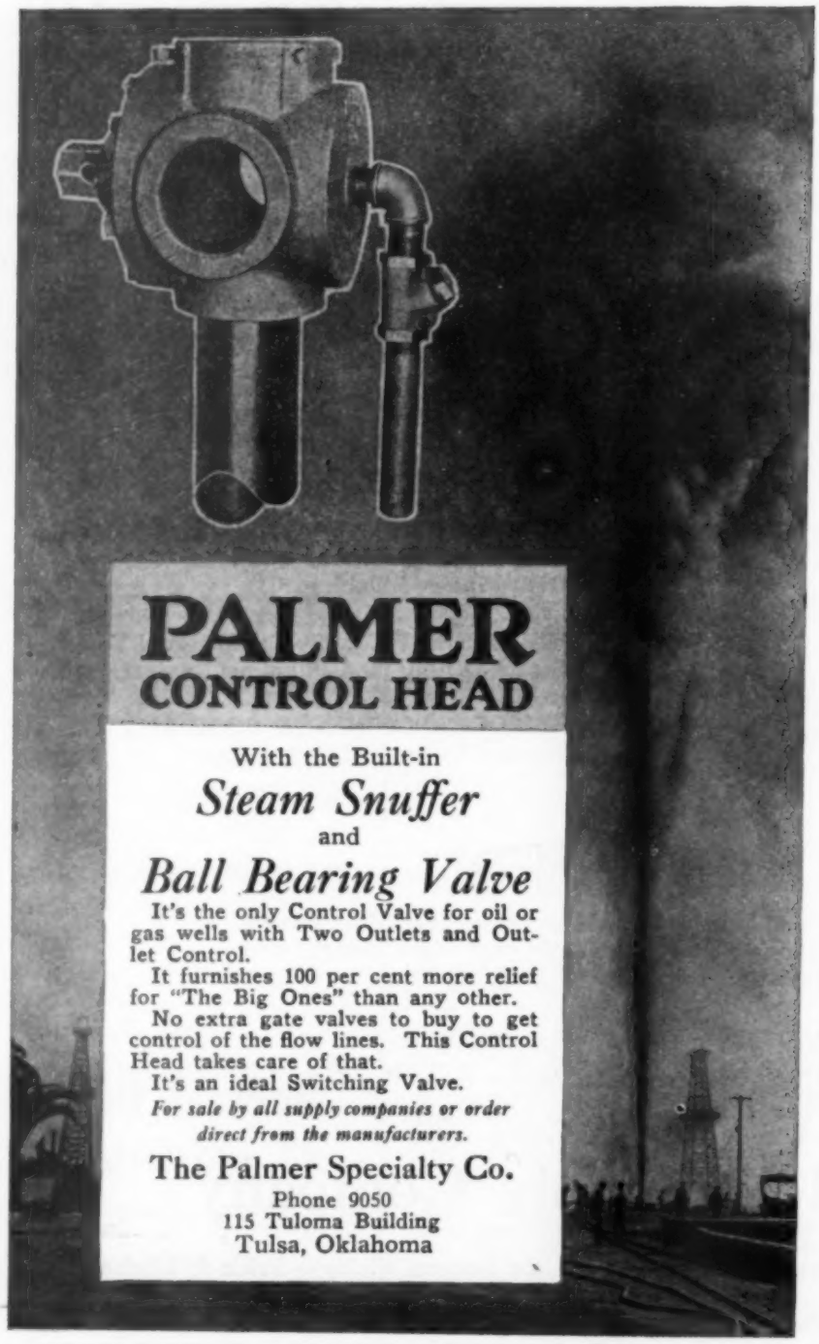
Stephens County—Texas Pacific Coal & Oil Co.'s, Ranger Texas, C. Bunney 50, T&P Ry sur, 805 ft SE No. 44. Sun Oil Co.'s, Amer. Exchange Nat. Bank Bldg., Dallas, Texas, H. Stoker 5, T&P Ry sur, 475 ft W No. 4; 6, T&P Ry sur, 648 ft W No. 4.

Throckmorton County — Reiter-Foster Oil Corp.'s, Magnolia Bldg., Dallas, Texas, C. Stubblefield 1, 991 TE&L sur, 330 to N and W lines.

Wichita Falls—Allen & Miller's, Staley Bldg., Wichita Falls, Texas, W. L. Hodge 1, H. B. Balch sur, 150 ft to S and E lines. M & V Oil Co.'s, Box 493, Wichita Falls, Texas, J. A. Fisher 6, HT&B Ry sur, 50 ft to S line. Texhoma Oil & Ref. Co.'s, Wicihta Falls, Texas, W. B. Throckmorton 2, J. F. Torrey sur, 50 ft S No. 1. Shaw & Lee's, Staley Bldg., Wichita Falls, Texas, A. V. McCarty 6, S. O. Fowler sur, 244 ft E No. 3. Texas Co.'s, Wichita Falls, Texas, K. T. Goetze 3, SA&MG Ry sur, 300 ft W No. 1. Wichita Oil Co.'s, Bob Waggoner Bldg., Wichita Falls, Texas, M. McFall 2-A, H. B. Balch sur, 150 ft to E and 200 ft to S line. Magnolia Petroleum Co.'s, Dallas, Texas, Rio Bravo 43, Sec 31, H&TC Ry sur, no lcn; A. G. Beach 22, CT Ry sur, 300 ft W No. 21; Gulf Prod. Co.'s, Wichita Falls, Texas, S. B. Burnett 30, Sec 1, T&NO Ry sur, 300 ft W No. 23; L. P. Douglas 13, Sec 11, HT&B Ry sur, 300 ft N No. 8. Steele Drilling Co. & Great Plains Pet. Co.'s, Morgan Bldg., Wichita Falls, Texas, Cunningham Est. 3, I&GN Ry sur, 60 ft N No. 2. J. L. Art's, Wichita Falls, Texas, Terhune 3, J. M. Sharp sur, 50 ft E No. 1. Simms Oil Co.'s, Dallas, Texas, B. F. Dutton 2, D. C. S. L. sur No. 4, 750 ft to W and 556 ft to S line. Humble Oil & Ref. Co.'s, Wichita Falls, Texas, L. P. Douglas 17, HT&B Ry sur, 941 ft to N and 635 ft to E line.

Wilbarger County—South Vernon Oil Co.'s Vernon, Texas, W. H. Stephens 12, H&TC Ry. sur, 150 ft to S and E lines. Wills-Guiberson's Vernon, Texas, Bailey 3, H&TC Ry. sur, 300 ft N No. 1. G. C. Wood et al's Box 378, Wichita Falls, Texas, A. Streit 1, H&TC Ry. sur, 2040 ft to E and 1997 ft to S line.

Webb County—H. L. Snodgrass, Laredo, Tex-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It's the only Control Valve for oil or gas wells with Two Outlets and Outlet Control.
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PERFECTION VAPOR PRESSURE TANKS
WOOD, AND BOLTED STEEL TANKS

MARTIN B. SCHUSTER JOSEPH N. SCHUSTER
M. B. AND J. N. SCHUSTER

Casper, Wyoming,

December
9th,1924.

Black-Sivalls & Bryson,
Casper, Wyo.

Gentlemen:

Reference to the Perfection Vapor Pressure tanks recently installed by your company on our Salt Creek lease on their merrit and which tanks were not to be paid for until we were entirely satisfied that they would do all for us that they were represented to do in the way of savings in evaporation and also as to gas pressure, we take pleasure in stating that these tanks have given entire satisfaction and that at the present time we are using the gas from these tanks to run our entire camp which is more than we have been able to do with other tanks on our lease.

We also find that these tanks lessen our loss by evaporation. Our pumper has informed us that oil left in your tank,and an equal amount left in a tank purported to be gas tight, that the evaporation is very slight if at all noticeable in your tank while a considerable loss has been noted in other tanks on our lease.

Youre very truly,
M.B.& J.N. Schuster.
By

"We Take Pleasure in Stating That These Tanks Have Given Entire Satisfaction"

WHEN an oil company writes us Perfection tanks are giving "Entire Satisfaction," such testimony ought to bear out all we have been claiming for this indispensable lease equipment.

If you still belong to the large number of oil producers who are paying tribute to evaporation, read the letter above carefully.

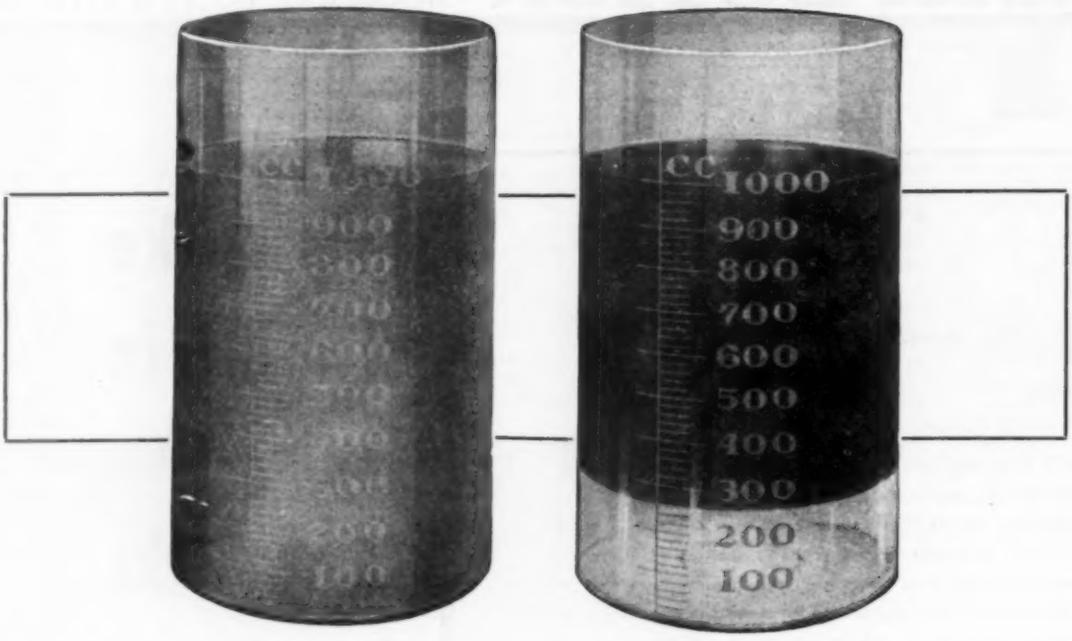
In stopping all appreciable losses besides furnishing gas for fuel and light Perfection Vapor Pressure Tanks are doing for these Wyoming operators exactly what they can do for you.

It's merely applying good judgment to your business in looking up our representative in your field today.

Black Sivalls & Bryson
INC.

BARTLESVILLE ~ OKLAHOMA

Branch offices in all principal active fields



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Oil and water emulsify only when an "emulsifying agent" is present. Tret-O-Lite acts chemically, rendering the emulsifying agent powerless and thus "breaking" the emulsion. Oil and water then separate easily, normally, by gravity. There is no other method which attacks the CAUSE of the trouble. TRET-O-LITE thus represents the one truly scientific treating process. This explains why it is widely used in every oil district and is the ONLY wholly successful method in many districts.

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WILDCATS FROM ALL SECTIONS

Using Diamond Drill in Search for Deep Oil in Upper Part of Montague County

Wichita Falls, Texas, Feb. 2.—Search for a deeper producing horizon underlying the Nocona shallow oil and gas field in the upper part of Montague County will be conducted by the Humphreys-Boyd Oil Company with a Sullivan diamond core drill. A machine and crew arrived in the field last week to make the first test in the Humphreys-Boyd Oil Company's J. W. Maddox 3, which has been shut in for more than one year with a total depth of 1952 feet after drilling through and shutting off gas pay at 772 feet making about fifty million cubic feet of gas daily. This test is located in the southwest corner of lot 5, C. W. Thompson survey, and in the center of the heavy gas area. The diamond drill will be sent to the bottom of the hole at 1952 feet, and take a four inch core of the lower formations to gain information relative to the possibilities of a deep producing horizon in the field.

The Humphreys-Boyd Oil Company has made locations for two tests to be drilled north and west of the Nocona oil and gas field, and will start drilling shortly on the W. W. Jones farm, Wm. Donoho survey, located a short distance northwest of The Texas Company's completed shallow well on the Isaac Gist farm. The second location has been made on the N. J. Howard farm, John Chambliss survey, located north of the Humphreys-Boyd Oil Company's discovery oil well of the field. Blair and associates have also made a location for a test on the north end of the field, and will drill on the C. L. Rolls land about 2700 feet east and 150 feet north of the southwest corner of the John Chambliss survey. Daniels-Rutis and Panhandle Refining Company have moved in star machine to drill on the M. H. Salmon farm about 2200 feet east and 2150 feet south of the northwest corner of Samuel Little survey. Daniel and Rutis are also to drill on the S. E. Howard farm, Finess Robertson survey.

After testing and passing up a series of shallow sands showing oil, the Petroleum Producers Company's C. H. Howard 1, Finess Robertson survey, is drilling below 2005 feet. The Texas Company's M. H. Salmon 1, Samuel Little survey, failed to encounter the usual heavy gas production in the shallow sands, and is drilling below 1000 feet. The Texhoma Oil and Refining Company's south offset to its completed and shut in oil producer on the N. J. Howard farm, John Chambliss survey, is drilling below 300 feet. Gulf Production Company is rigging up rotary to drill a third deep test on its Nocona structure, located a short distance east of the town of Nocona, after having completed failures on the first two attempts for deep production in this section of Montague County.

The Big Indian Oil and Development Company's B. W. Davis 1, which opened a new oil producing area for the North Texas District in Cooke County last November, is preparing to run tubing and rods to try and make the well flow from sand at 3519-21 feet. Leonard and James are building derrick for a test of this deep pay on the Hamilton farm, while the Red River Drilling Company's Jones 1 is drilling below 1300 feet. Many of the major companies and independent operators from both Texas and Oklahoma have taken lease protection in the general vicinity of the Big Indian well since it came in flowing by small heads.

as, De la Garza 1, No. 262 sur, 150 ft to N and E lines. O. W. Killam's, Laredo, Texas, A. M. Bruni 4, Albercas sur, 339 vs. to S and 107 vs. to W line.

Young County—Humble Oil & Ref. Co.'s Wichita Falls, Texas, B. Schlegel 1, BBB&C Ry sur, 150 ft to N and W lines. Murchison, Fain & Golding's, Wichita Falls, Texas, W. E. Gambrell 2, No. 1 BBB&C Ry sur, 300 ft N No. 1; W. E. Gambrell 3, No. 1 BBB&C Ry sur, 1690 ft to N and 150 ft to E line; B. Schlegel 1, No. 1 BBB&C Ry sur, 150 ft to N and W lines; B. Schlegel 2, No. 1 BBB&C Ry sur, 300 ft E No. 1. Murchison & Fain's, Wichita Falls, Texas, A. Weichman 1, 173 TE&L sur, 150 ft to S and W lines. Simms Oil Co.'s Dallas, Texas, J. D. Carpenter 5, 237 TE&L sur, 861 ft. to N and 150 ft to W line.

CALIFORNIA

Belridge Field—Bear State Oil Co.'s No. 13, 30-28-21.

Kern River Field—C. S. Aker's No. 1, 34-27-27.

Long Beach Field—Bassett, Meyers & Rorex's No. 1, 24-4-13. Alvah M. Kaime's Flower State 1, 29-4-12.

Los Angeles County Field—J. J. Rekar's No. 1, 11-2-15.

Midway Field—Honolulu Cons. Oil Co.'s No. 64, 6-32-24.

Rosecrans Field—Pacific Pet. Corp.'s No. 3, 7-3-13.

San Bernardino County Field—Western Pacific Oil Co.'s No. 2, 4-10-4.

Sunset Field—J. W. Jameson's No. 3, 2-11-24. Midway Oil Co.'s No. 370, 35-12-24.

Coastal Wildcats

COMPLETION

Company, Well and Location	Initial Production Bbls.	Depth
Fort Bend County—		
The Texas Co.'s Fee 1	‡	3570

DRILLING REPORT

ANGELINA COUNTY—Ferdinand Heine's Henderson-Ellison 1, J. H. Ellison sur, 170 ft to W and 150 ft to S line, reaming below 530 ft.

BRAZORIA COUNTY—D. F. Bryan Prod. Co. & Hamm et al's Bryan 1, at Freeport, J. G. McNeel sur, td 3181 ft, set 6⅝-inch casing at 2980 ft, dr out plug. Z. Gayler's Gayle & Dunsmoor 1, 6 Miles S Angleton, W. J. Russell sur, 500 ft to W line, reported dr below 900 ft. Gulf Prod. Co.'s No. 1, rigging up.

BRAZOS COUNTY—Bryan Pet. Co.'s Watthuber 1, 2 miles S College Station, C. Burnett sur, sd at about 2500 ft.

CHAMBERS COUNTY—S. J. Hindman's Bullock-Collier 1, Collier 200 acre lease, Griffith league, 2891 feet to W and 60 ft to S line, reported dr below 1050 ft. Texas Co.'s A. Fisher 1, H. Griffith sur, 630 ft to E and 1130 ft to S line, dr below 950 ft.

FORT BEND COUNTY—Gulf Prod. Co.'s Moore 3, dr 890 ft. Neilan Oil Co.'s B. Frederick 1, sec 19, S. George sur, NW cor, 4½ miles W Rosenberg, reported dr below 1200 ft. Pathfinder Oil Co.'s Davis & Co. 2, sec. 101, George Waters sur, dr below 1200 ft. James W. Rich et al's Moore-Hager 2, at Big Creek, 300 ft NE No. 1, SE side of dome, ready to spud in. Rycade Oil Corp.'s Meier 1, 1200 ft S and 800 ft W Nash 2, 650 ft S and 450 ft W of NE cor of Meier tract, encountered anhydrite at 640 ft, dr in same at 725 ft; Nash 1, 2600 ft E and 200 ft S of NW cor of Capt. Nash's 200 acre lease, dr below 2220 ft; Nash 2, Alsberry sur, 400 ft E and 600 ft S of NW cor Nash's 486 acre tract, 28 degrees NW and 4650 ft NW No. 1, dr 3105 ft. Texas Co.'s Fee 1, at Big Creek, 2100 ft NE of W cor and along NW line, 50 ft SE at right angles from Texas Co.'s N line, abn in salt at 3570 ft.

GALVESTON COUNTY—Gulf Prod. Co.'s George E. Smith 2, at High Island, dr 2580 ft.

HARDIN COUNTY—Kirby Pet. Co., Munson & Anderson et al's Hodges 3, near Batson, Hodges 202 acre lease, sd at 3135 ft.

HARRIS COUNTY—Dome Dev. & Pet. Co.'s Schneider 1, Schneider farm, blk 41, John D. Taylor sur, temp abn at 850 ft. Texas Co.'s Warren 1, 3 miles S Hockley, 400 ft NE Staiti 17 and 10 degrees to E of line drawn through Nos. 13, 15 and 17, dr 120 ft; Warren 2, 1000 ft N and 45 degrees W of No. 14, spudded in.

JACKSON COUNTY—Vanderbilt Pet. Co.'s Seliner 1, 4 miles N Vanderbilt, C. W. Hall subdivision of Harwood-Burns ranch, sd at 2720 ft.

JEFFERSON COUNTY—Houston Oil Co.'s Gulf-Pipkin 2, Pipkin & Davis sur, rigging up; Staiti 5, S. Eaton sur, 250 ft S Staiti 4, dr 2669 ft. Paggi Bros. Wilson Hardware Co. 1, Wilson Hdw. tract, ¾ miles SW Miller 1, ready to spud in.

MATAGORDA COUNTY—Marland Oil Co. of Texas' Murphy 1, Jeremiah Dwyer sur, dr 4650 ft. Rycade Oil Corp.'s Gray 1, offset to Sisk 1, 150 ft N of N line of Texas Co.'s 20 acre lease, 150 ft W of E line of blk 2, swabbing and bailing at 3274 ft, 400 ft oil standing in hole; Gray 2, 600 ft N of S line and 140 ft W of E line of blk 2, dr 2326 ft, cored sand and lime at 2316 ft. Sheppard Mound Oil Co.'s Hawkins 2, offset to Marland's Murphy 1, 3000 ft E of Commonwealth Oil Co.'s Hawkins 1, 1000 ft SE Hawkins 3, dr below 600 ft.

WALKER COUNTY—Big Ridge Oil & Gas Co.'s No. 1, at Weiser's Bluff, 14 miles N of Huntsville and 12 miles W of Riverside, Eastham sur, set 20-inch casing to 116 ft and 15¼-inch to 496 ft, dr below 650 ft.

WHARTON COUNTY—Gulf Prod. Co.'s Cloud 2, 1400 ft E No. 1, dr 1740 ft; Felder 3, S. Ingram sur, 20 ft to W and 1735 ft to N line of blk 3, dr below 2580 ft.

C. W. King, of Oklahoma City, oldest assistant attorney-general in point of service in the Oklahoma state government, has resigned, effective February 1, to enter the legal department of the Marland Oil Company at Ponca City, Oklahoma.

Central West Texas Wildcats

COMPLETIONS

Company, Well and Location	Initial Production Bbls.	Depth
Callahan County—		
O'Donnell et al Cathey 1	*	1800
Loving County—		
P-V Petroleum Co. N. E. Chapman 1	†	715
Palo Pinto County—		
Hart et al Smith 1	*	2005
Little Caddo Oil Synd. Fitzgerald 1	*	1853
Reagan County—		
Big Lake Oil Co. University 15, (Sec. 12, Blk. 2)	1625	2876
Brandon-McCamey et al University 1, (Sec. 27, Blk. 2)	*	3204
Crockett Drilling Synd. et al University 1, (Sec. 9, Blk. 9)	*	3500
Mid-Kansas & Transcontinental Oil Co. Hughes-Mason 1	*	3397
Texon Oil & Land Co. University 1, Group 2, (Sec. 22, Blk. 9)	*	6002
University 5, Groupe 1, (Sec. 36, Blk. 9)	†	435
Transcontinental Oil Co. University 1, (Sec. 10, Blk. 1)	*	3615
Upton County—		
Virginia Texas Pet. Co. University 1, (Sec. 14, Blk. 15)	*	3740

DRILLING REPORT

BROWN COUNTY—M. T. Anderson-Moore et al's Wheeler 1, sd 2805 ft. Calvert et al's Prather 1, sd 1455 ft. Ctnyon Oil & Gas Co. et al's Ellsberry 3, lcn. Gillman et al's Newton 7, co after shot 1289 ft; Moore 2, rigging up. Honea et al's E. DeBusk 2, sd 2300 ft. McMurray et al's Newton 2, lcn. Moore & Wilson's Westerman 2, dr 730 ft. New Era Oil Co.'s Prather 3, dr 1308 ft. Omaha Southern Oil Co.'s G. B. Gaines 2, sd 1840 ft. D. B. Thomas et al's Bohara 1, sd 2410 ft. Ward Oil Co.'s Windham 1, sd 1190 ft. Williams et al's H. A. Newton 1, dr 725 ft.

CALLAHAN COUNTY — Byron-Union Oil Co.'s Hennessey 1, dr 4455 ft. Chas. Dutton et al's Cathey 7, rig; Harwell 1, sd 800 ft. Junior Oil Co.'s A. L. Huntington 1, sd 2280 ft. A. G. McMath et al's Isenhower 1, spd and sd. L. D. Prewitt et al's Geo. T. Crane 1, fsh 1879 ft; Crane 2, sd 1010 ft; W. W. Crane 1, ur cas 1630 ft; Jones 1, spd and sd; Linecum 1, rig. Urban et al's Alvord 1, rig.

COLEMAN COUNTY—D. R. Bailey et al's Kelley-Grady 1, sd 305 ft.

PALO PINTO COUNTY—Ed. S. Britton & E. B. Ritchie et al's Strawn Coal Co. Fee 3, fsh cas 3125 ft. Cameron & Anderson's W. O. Pollard 2, sd sd 1145 ft. J. D. Cranford et al's L. Smith 1, sd 750 ft. Hughes et al's Belding 1, sd 2320 ft; Weldon 2, sd 2430 ft. Hart et al's Cardwell 1, machine. Hart Oil Corp.'s Hart 10, dr 160 ft. Little Caddo Oil Synd.'s Massie 2, sd 905 ft. McKinney et al's Marsden 1, sd 465 ft. S. W. Manning et al's R. Hitson 1, sd 3665 ft. Nelson Oil Co.'s Owens 1, spd and sd. Phillips et al's Stringer 1, dr 930 ft. Pender Production Co.'s Rasmussen 1, lcn. Phillips & Graham's J. A. Caudill 1, sd 3800 ft.

PARKER COUNTY—English et al's Peters 1, dr 580 ft. Weaver et al's Evans 1, dr 900 ft.

BREWSTER COUNTY—Green Valley Oil Corp.'s W. A. Wilson 3, (Sec. 8, Blk. 212) dr 665 ft. Tesnus Oil Corp.'s A. S. Cage 1, sd 2555 ft. Brewster Oil Corp.'s W. H. Kokernot 1, sd 2535 ft. Portland Oil Synd.'s State 1, sd 3220 ft. Nine Points Oil & Gas Co.'s Peralto 1, sd 3060 ft.

COKE COUNTY—West Virginia Oil Marketing Assn.'s J. R. Mims 1, dr 95 ft. Mexia-Equitable Oil Co.'s W. H. J. Hodges 1, sd 2500 ft.

CONCHO COUNTY — Dome Prod. Co.'s Mrs. C. M. Hartgrove 1, dr 381 ft. Schultz Oil Co.'s W. O. Schultz 1, sd 3225 ft.

CRANE COUNTY — Texas Development Co.'s Jax Cowden 1, sd 2630 ft.

CROCKETT COUNTY—J. S. Cosden et al's University 1, (Sec. 34, Blk. 12) dr 115 ft. Peer Oil Corp.'s University 1, (Sec. 14, Blk. 15) lcn. Kanawha-Angelo Oil Co.'s University 1, (Sec. 9, Blk. 52) rig. Crockett Drilling Synd.'s Robt. Massey 1, sd indefinitely 1755 ft. World Co.'s L. P. Powell 1, top salt 1173 ft, sd with hole full water 2360 ft. Red Ball Oil Co.'s University 1, lcn.

CULBERSON COUNTY—J. D. Wesner et al's Mack Sayles 1, sd 3105 ft.

DAWSON COUNTY — Lamesa Oil Co.'s John Burns 1, sd 2150 ft.

ECTOR COUNTY—Farmers Oil Co.'s Andy Newham 1, sd 1400 ft.

EL PASO COUNTY — Burns & Knight's Fee 4, dd, sd 4825 ft.

FISHER COUNTY—Pyron Oil Co.'s J. S. McCall 1, sd 3120 ft.

GARZA COUNTY—B. V. Blackwell et al's J. M. Boren 1, sd with oil in hole after shot 2443 ft. Mitchell-McDaniel & Jewell's Connell's dr 2355 ft.

GLASSCOCK COUNTY — Gulf Prod. Co.'s L. S. McDowell 1-C, dr hard lime 2945 ft. Cushing Ranch Drilling Assn.'s W. H. Sparkman 1, sd 1950 ft. Ledger Co.'s C. I. Brunson 1, sd 3520 ft.

HUDSPETH COUNTY—Boole Oil Assn.'s Gardner et al 1, sd 1540 ft. Hueco Basin Oil Co.'s University 1, sd 2560 ft. Wm. Loftus et al's Slaughter 1, sd 1625 ft.

HOWARD COUNTY—Big Springs Oil Co.'s Mable O. Quinn 1, sd 3640 ft.

IRION COUNTY—Gladys Belle Oil Co.'s J. D. Sugg 1, (Sec. 27, Blk. 2) dr 1425 ft. Virginia-Texas Pet. Co.'s W. M. Noelke 1, (Tom Green Co. School Lands) fsh 1670 ft.

JONES COUNTY—Anson Oil & Dev. Co.'s C. B. Brown 1, sd 1855 ft. C-H Oil & Dev. Co.'s J. A. Cullom 1, sd 3500 ft.

KARNES COUNTY—Alidor Oil Co.'s A. W. Hyatt 1, sd 1156 ft.

LOVING COUNTY—P-V Pet. Co.'s N. E. Chapman 1-A, dr 240 ft. Ramsey Prod. Co.'s Russell 1, sd 4485 ft; Russell 2, sd 810 ft.

MITCHELL COUNTY—Atlantic Oil Prod. Co.'s Joe Clark 1, lcn. The California Co.'s Paul Elder 1, dr 2000 ft; W. H. Abrams 8, rig; Morrison 12, dr 1425 ft. Eastland Oil Co.'s W. D. Keynard 1, dr 850 ft. Eddleman et al's A. C. Gist 1, dr 3100 ft. Sloan Oil Co.'s H. C. Miller 3, dr 2880 ft. Morrison & Thompson's C. M. Adams 1, lcn. J. T. Harris et al's W. C. Brown 1, sd 370 ft; Brown 2, sd 300 ft.

PECOS COUNTY—Gulf Prod. Co.'s White & Baker 1, (Sec. 85, Blk. 194, G. C. & S. F. sur) rig. Plymouth Oil Co.'s Perry Ranch 1, dr 830 ft. Arkansas Fuel Oil Co.'s Blackstone & Slaughter 1, setting 10-inch cas 776 ft. Transcontinental Oil Co.'s Sherbino 1, sd indefinitely 1701 ft. Trans-Pecos Oil Co.'s H. L. Thomas 1, sd 1830 ft; W. W. Turney 1, sd 2900 ft; Johnson-Troy 1, sd 2965 ft; Bennett 1, sd 1240 ft. Southern States Lease & Prod. Co.'s J. M. Odem 1, sd 1205 ft.

PRESIDIO COUNTY—Tesnus Oil Corp.'s Toole Estate 1, sd 965 ft.

REAGAN COUNTY—Big Lake Oil Co.'s University 14, (Sec. 1, Blk. 2) sd for storage 2881 ft; University 16, (Sec. 1, Blk. 2) dr 583 ft; University 17, (Sec. 1, Blk. 2) dr 1800 ft; University 18, (Sec. 25, Blk. 9) dr 510 ft; University 19, (Sec. 12, Blk. 2) rigging up; University, 20 (Sec. 25, Blk. 9) lcn; University 21, (Sec. 1, Blk 2) materials; University 22, (Sec. 1, Blk. 2) materials; University 23, (Sec. 1, Blk. 2) lcn; University 24, (Sec. 1, Blk. 2) lcn. B. H. Cogdell et al's University 1, (Sec. 23, Blk. 8) rebuilding burned rig, td 365 ft. California Co.'s University 1, (Sec. 13, Blk 8) dr 2985 ft. H. S. Grayson et al's University 1,

A FITTING FEATURE FOR The World's Best Bolted Steel Tank

THE PATENTED CRIMP
or offset joints and seam

MADE OF KEYSTONE COPPER STEEL

The Patented Crimp

The patent on Maloney Tanks covers the CRIMP or offset in the seams and joints. This offset is on the edge and ends of each stave and along the edge of the bottom sheets. The recess admits a specially prepared packing or gasket and when the joints and seams are securely bolted up, they present an even, flush surface. This also strengthens seams and joints.

The offset on the ends of the staves takes care of the lap formed by the edge of one stave being placed over another and insures a strong, tight joint at this point. Special quality packing in all tanks.

MALONEY TANK MFG. CO.

Tulsa, Oklahoma

We now furnish "buck" type vacuum-pressure valves and valve breakers

"ALONE IN QUALITY"

12 to 3,000 Bbls. Capacity

Prompt, Dependable Export Service

MALONEY

(Sec. 28, Blk. 8) dr 2975 ft. J. K. Hughes et al's University 1, (Sec. 5, Blk. 9) dr 2375 ft. P. H. Hoffman et al's University 1, (Sec. 23, Blk. 11) dr 465 ft. H. B. McGuire et al's C. W. Merchant 1, (Sec. 12, Blk. "A", L.S.&V. Ry sur) materials. Pilot Oil Corp.'s University 1, (Sec. 11, Blk. 9) rig. Simms Oil Co.'s Sawyer Cattle Co. 1, (Sec. 12, S. A. Glass sur) top salt 910 ft, dr 1650 ft. J. T. Stover et al's University 1, (Sec. 34, Blk. 11) sd 200 ft. Texon Oil & Land Co.'s University 2, Group 2, (Sec. 26, Blk. 9) rig; University 4, Group 1, (Sec. 1, Blk. 8) dr 1910 ft; University 5, Group 1, (Sec. 36, Blk. 9) junked 435 ft; University 6, (Sec. 36, Blk. 9) lcn; University 7, (Sec. 36, Blk. 9) rig; University 8, (Sec. 36, Blk. 9) lcn; University 9, (Sec. 36, Blk. 9) lcn. University Oil Co.'s University 1, (Sec. 17, Blk. 10) top salt 980 ft, water in red rock 2330 ft, dr 2400 ft. C. J. Wrightsman et al's Ingham 1, (Sec. 39, Blk "C", L.S.&V. Ry sur) dr 995 ft.

REEVES COUNTY—Dome Drilling Synd.'s Ira J. Bell 1, flowing water 655 ft. Dixieland Oil Co.'s Oates 2, sd 4505 ft.

RUNNELS COUNTY — Subscribers Assn.'s Russell-Gieseke 1, dr black lime 3380 ft.

SCURRY COUNTY—Camp Springs O. & R. Co.'s W. Y. Jones 1, sd 600 ft; J. O. Quinn 1, sd 3570 ft; L. E. Howell 1, lcn. Hermleigh Oil & Gas Co.'s J. W. Burris 1, sd 2965 ft. Stanton Oil & Gas Co.'s J. W. Riley 1, sd 2500 ft.

STERLING COUNTY—Chas. Pettit & Albert Adkinson et al's C. C. Reynolds 1, lcn. Ford & Cogdell et al's W. L. Foster 1, dr 1565 ft. Chicago-Texas Oil & Gas Co.'s D. C. Durham 1, sd 1427 ft; Durham 2, sd 1406 ft. Co-Operative Lease & Dev. Co.'s Douthitt 1, sd 2000 ft. Fidelity Oil Corp.'s G. R. Hull 1, sd 1780 ft.

STONEWALL COUNTY—Elder Nance et al's Ward Estate 1, dr 1585 ft.

TAYLOR COUNTY—Sanger Oil & Ref. Co.'s McClure 1, lcn; S. P. Hollingshead 1, sd 1710 ft; Tom Sawyer 1, sd 2700 ft.

TERRELL COUNTY—R. E. Dunn et al's Fee 1, sd 405 ft. Southwest Texas Oil & Gas Co.'s Fee 1, sd 3515 ft.

UPTON COUNTY—Big Mesa Oil Co.'s University 1, (Sec. 17, Blk. 3) spd and sd. Bell-Regan et al's University 1, (Sec. 2, Blk 4) sd for cas 310 ft. Suggs & Chancellor et al's University 1, (Sec. 8, Blk. 4) spd and sd. W. P. Morris et al's H. M. Halff 1, spd and sd.

VAL VERDE COUNTY—East Del Rio Oil Co.'s Russell & Weathersbee 1, sd 2605 ft. Independent Operators' Whitehead 1, sd 2155 ft. Joe W. Morris et al's Moore Estate 1, sd 2280 ft. Re-Clamation Oil Prod. Co.'s J. B. Moore 1, sd 2575 ft. Hodges & Wright's B. S. Harrison 1, sd 1100 ft.

WARD COUNTY—Cook & O'Brien's G. W. O'Brien 1, sd 1175 ft.

East Central Texas Wildcats

BOWIE COUNTY—Hooks Oil & Gas Co.'s S. C. Ball 1, (Mary Morris sur.) Pecan Gap chalk at 921 ft, dr hard chalk 1175 ft. Geo. B. McCullough & Roell's W. R. Williams 1, (L. M. Rice sur.) spudded and sd. Williams et al's Daulby 1, sd 2050 ft. Delaney Oil & Gas Co.'s Rochelle 1, (Collin-McKinney sur.) sd 2405 ft. Daulby Springs Oil Co.'s Perky 1, (Bowie County School Land sur.) sd 2250 ft.

FALLS COUNTY (Kosse District)—C. W. Harrison et al's J. W. Preston 1, (H. Anderson sur) top Austin chalk 2916 ft, out of Buda lime 3543 ft, setting 6 5/6 casing to test good show oil and gas in Edwards lime, td 3620 ft.

FANNIN COUNTY—Lester Pet. Co.'s S. D. Graves 1, (Wm. Hutchins sur) dr cap rock 2532 ft.

FRANKLIN COUNTY—Arkansas Fuel Oil Co.'s J. A. Dickson 1, (Thomas Willison sur) dr 1450 ft. Marshall & DeGenther's Swanner 1, (Hanks sur) sd for casing 1800 ft.

HENDERSON COUNTY—Fred E. Haynes et al's E. G. Bounds 2, (Henry Jeffreys sur) sd 2000 ft.

HOPKINS COUNTY — Bar-Tex Drilling Co.'s C. H. McClure 1, (D. Waggoner sur)

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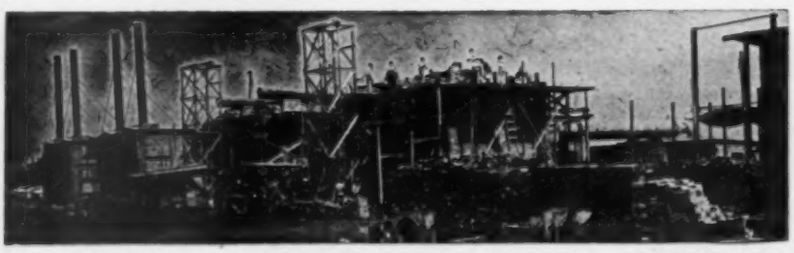

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dk. Stough & Potts et al's J. R. Fitzgerald 1, (John Binnion sur) sd 1610 ft. C. A. Kelsey et al's Addie Brooks 1, (D. Dowdle sur) sd 1825 ft.

HUNT COUNTY—Gulf Production Co.'s M. E. Alexander 1, (E. Tidwell sur) Pecan Gap chalk 1820-1940 ft; Austin chalk 2262-2685 ft, dr shale 2745 ft; W. B. Bryan 1, (Jas. Cole sur) Austin chalk 1803-2307 ft, dr shale 3045 ft. George Lyles et al's D. B. Meadows 1, (James Levins sur) setting surface casing. Marland Oil Co.'s P. Bauknight-Fee 1, (J. Hamilton sur) rigging up. Tullal & Kelsey et al's J. W. Barnett 1, (Alex Smith sur) dk.

KAUFMAN COUNTY—Marland Oil Co.'s R. E. Kenshale-Arnold 1, (B. S. Newman sur) top Austin chalk 2458 ft, dr broken chalk 2845 ft. Atlantic Oil Prod. Co. & Jackson-Cathcart's R. S. Watkins 1, (C. Pearson sur) rig burned, td 2742 ft. J. A. Germany et al's W. S. Kirby 1, (S. Edens sur) sd indefinitely 3255 ft. Humble Oil & Ref. Co.'s J. T. Matthews 1, (Antonio Reyes sur.) rig for core test.

LAMAR COUNTY—Interstate Oil Co.'s Ben Haynes 1, (Larkin-Rattan sur.) steel dk.

NAVARRO COUNTY—Atlantic Oil Prod. Co. & R. R. Penn's Edna Absher 1, (T. J. Jourdan sur.) Bazette District, lcn. Bankers Trust Co.'s McCormick 1, sd 1829 ft. Elliott & Nicolle et al's D. J. Westbrook 1, (Henry H. Horn sur.) sd 2005 ft. Alex Patrick et al's W. L. Roberts 1, (Jos. Mayor sur) sd 1740 ft. Moore Bros. et al's Mrs. E. R. Quimby 1, (Q. N. Anderson sur) gas blowout 1245 ft. R. R. Penn et al's Jennie White 1, (NE Currie) dk.

LIMESTONE COUNTY—Bain Creek Oil Co.'s J. W. Pate 1, (P. Varella sur) fsh 400 ft. Pure Oil Co.'s S. W. Jackson 1, (Webster sur) std to drill in 3073 ft. J. B. Patty-Tarkington et al's Hornbeck 1, (J. Boyd sur) sd 2925 ft. Zay Gardner et al's Speight 1, bailed dry in sand 3642-55 ft.

RAINS COUNTY—Cree & Coalter (was Ferguson & Short Bros.) W. D. Peebles 1, (J. A. Tibbles sur.) sd 700 ft.

RED RIVER COUNTY—Clarkville-Texas Oil Co.'s Summer 1, (Barclay-Hall sur) sd 2000 ft. Red River Oil & Gas Co.'s Dinwiddie 1, (R. C. Anderson sur) sd 2120 ft. Johnson Pet. Co.'s Antone & Worley 1,(Robt. Gamble sur) sd 3590 ft.

ROCKWALL COUNTY—M. H. West-J. J. Jackson & G. C. Rochelle's J. S. Shook 1, (S. S. McCurry sur.) co 2510 ft, td 2970 ft.

TITUS COUNTY — Magnolia Pet. Co.'s George Antone 1, (M. V. Delgado sur) dr 2060 ft after repairing pulled in dk.

VAN ZANDT COUNTY—Free State Oil Co. (was Porter & Holmes) J. T. Dunbar 1, (Van Sickle sur) sd for fuel 3600 ft.

WOOD COUNTY—Golden Oil Co.'s J. D. Adrian 1, (Hallmark sur) sd for fuel 4168 ft.

North Texas Wildcats

COMPLETION

Company, Well and Location	Initial Production Bbls.	Depth
Wilbarger County——		
Bridwell & Heydrick's W. H. Stephens 3	350	2291

DRILLING REPORT

BAYLOR COUNTY—C. Andrade 3rd's B. F. Cockrell 1, lcn. Dallas Oil Co.'s Shawver Bros. 1, sd 1905 ft. Duke & McKee's J. Dipprey 1, lcn. Ted Harris et al's F. Howe 1, dr 400 ft. Lehman et al's Shawver Bros. 1, dr 1125 ft. Magnolia Pet. Co.'s W. H. Portwood 2, sd 1413 ft. J. R. McCalden et al's Martin Bros. 1, sd 50 ft. Monroe Production Co.'s E. S. Wallace 1, dr 300 ft. D. H. Moore et al's Fancher & Sons 2, dr 150 ft. Richardson Bros. et al's Wallace Estate 1, dr 950 ft. Skinner et al's W. E. Martin 1, dr 1280 ft. Staley & Wynne's E. P. King 1, dk. Texhoma O. & R. Co.'s W. H. Portwood 1, sd 1400 ft.

CLAY COUNTY—Ashcraft et al's W. H. Chilson 1, dk. Atlantic City Prod. Co.'s Scaling 1, sd 2890 ft. J. T. Cumley's J. D. Stine 2, dr 250 ft. L. R. Dixon et al's R. H. Godfrey 2, spudded. E. C. De'Yarmitt's Scott 2, sd 600 ft. Knox Finley Dev. Co.'s Scott 4, dr 1010 ft. Mills-Bennett's E. L. Holloway 1, sd 250 ft. Piedmont Oil Co.'s Dean 1,

sd 1210 ft. Shelton Oil Co.'s H. Boddy 2, sd 1370 ft. Somers & Nantz's Mary C. Parker 1, sd 1000 ft. Southern Exploration Co.'s Byers Bros. 1, rigging up.

COOKE COUNTY—Big Indian Oil Co.'s W. B. Davis 1, sd 3525 ft.

DENTON COUNTY—Arbuckle Asphalt & Pet. Co.'s K. Fonteberry 1, sd 700 ft.

GARZA COUNTY—Union Pet. Corp.'s C. C. Connell 1, fsh 1850 ft.

GRAYSON COUNTY—W. R. Shankle et al's J. Marshall 1, second hole, sd 1100 ft.

KNOX COUNTY—Brazos Bend Oil Co.'s J. E. Clark 1, sd 2020 ft. Evans et al's Ella Lawson 1, sd 765 ft.

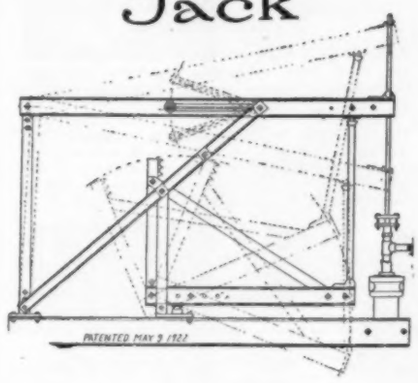
MONTAGUE COUNTY—Blair et al's C. L. Rolls 1, lcn. Gulf Production Co.'s M. E. Benton 2, dk. Daniels & Rutis' Mrs. Salmon 1, star machine. P. F. Lesh's Mrs. Salmon 1, sd on sand 935-41 ft. Owenwood Oil Corp.'s Mrs. Salmon 1, dr 615 ft. Petroleum Producers Co.'s C. H. Howard 1, dr 1980 ft. The Texas Co.'s I. A. Gist A-3, dr 910 ft; Mrs. Salmon 1, dr 1000 ft. Texhoma Oil & Ref. Co.'s N. J. Howard 2, dr 300 ft; J. W. Maddox 1, dr 1310 ft.

STONEWALL COUNTY — Elder Nance's Ward Estate 1, sd 1550 ft.

THROCKMORTON COUNTY—Cragin et al's J. R. Burkhalter 1, sd 50 ft. Groves & Burton's Reynolds Cattle Co. 1, sd 672 ft. Hale-Tex Oil Co.'s Mrs. J. L. Stubblefield 1, dr 300 ft. Hamilton et al's J. T. Odell 1, sd 3050 ft. C. F. Kelsey's W. D. Housley 1, sd 50 ft. King et al's A. P. Broyles 1, sd 900 ft. Bruce Larkin et al's Mrs. Richards 1, sd 790 ft; Richards 2, dr 220 ft. McGee et al's J. T. Davis 1, sd 1400 ft; J. J. Keeter 1, sd 330 ft; Lila D. Marlin 1, sd 100 ft. McNeil et al's Travis Co. School Land 1, rigged up. McKnight et al's A. H. Haley 1, r 1300 ft. Plans Production Co.'s G. S. Wise 1, dr 1200 ft. Schimmell et al's H. W. Kelley 1, sd 100 ft. Skinner et al's Mrs. M. A. Mitchell 1, sd 600 ft; J. W. Newton 1, rigging rotary. The Texas Co.'s A. L. Smythe 1, dr 1280 ft.

WILBARGER COUNTY—Allday et al's W. S. Lundy 1, dk. American Ref. Co.'s W. T. Waggoner 1, dk. Atlantic Pet. Co.'s Parker 1, dr 1250 ft. Barker & Hamilton's A. P. Morris 1, sd 305 ft. Barkley & Meadows' W. H. Stephens 1, dr 2144 ft. Bridwell & Heydrick's S. A. Dill 3, dr 1700 ft; Dill 4, dr 1660 ft; J. W. McCrary 1, sd 150 ft; W. H. Stephens 6, dr 2190 ft. Bridwell, Heydrick & Donohoe's S. A. Dill 3, dr 1500 ft. Bridwell, Heydrick & T. P. Coal Co.'s W. T. Waggoner 1, second hole, dr 300 ft. W. G. Burton's S. A. Castlebury 1, dr 200 ft. Burton & Ruff's W. T. Waggoner 1, sd 400 ft. Dill Farm Oil Co.'s W. B. Dill 1, sd 2450 ft. Electra Gulf Oil Co.'s M. Ditto 1, dr 1950 ft. W. W. Graham's M. J. George 1, rigged up. Gulf Production Co.'s C. Zipperly 1, dr 200 ft; W. T. Waggoner R-1, dr 300 ft; Waggoner S-1, dr 900 ft. R. N. Hamilton et al's B. L. Haynes 1, dr 1750 ft. Hart et al's Smith 1, sd water 2125 ft. Hoffer Oil Corp.'s W. T. Waggoner 1, dr 400 ft. Humble Oil & Ref. Co.'s R. L. Castlebury 2, dr 1160 ft; Castlebury 3, dr 900 ft; Castlebury 4, dr 1150 ft; Castlebury 5, dr 1200 ft; Castlebury 6, dr 400 ft. W. T. Waggoner 1, dr 1340 ft. T. A. Key et al's W. T. Waggoner 1, rigged up. C. F. Kolp's Waggoner 2, dr 1770 ft. J. B. Levy et al's W. T. Waggoner 1, dr 1250 ft; D. Wheeler 1, dr 1200 ft. Lippard Oil Co.'s F. Fluhman 1, dr 1015 ft. Little Oil Co.'s J. T. Youngblood 1, dr 1560 ft. McCamey et al's G. W. Richardson 1, sd 2060 ft; Richardson 2, set casing on sand 1295 ft; W. H. Stephens 2, dr 500 ft; Stephens 3, dr 400 ft; Stephens 4, rigging up. Ed Mulligan et al's W. T. Waggoner 1, sd 1200 ft. Murchison & Pigg's Davis 1, sd 1025 ft. Mutual Oil Co.'s C. Zipperle 1, approximately five million ft of gas, td 1240 ft. Noble Oil Co.'s W. T. Waggoner 1, sd 2048 ft. Oxford Oil Co.'s W. T. Waggoner 1, dr 2020 ft. W. Priddy et al's R. L. Castlebury 1, dr 1200 ft; Castlebury 2, dr 1160 ft. W. L. Ruff's W. T. Waggoner 1, dr 850 ft. W. J. Sheldon et al's W. J. Sheldon 1, dr 1990 ft. J. F. Shipley's B. W. Murphy 1, fsh 500 ft. F. S. Skinner's Fred Streit 1, dr 1600 ft. South Vernon Oil Co.'s W. H. Stephens 6, dr in 1965 ft; Stephens 7, dr sand 2030 ft; Stephens 8, sd 2030 ft; Stephens 9, sd 1950 ft; Stephens 10, dr in 1980 ft; Stephens 11, dr 2000

The Jensen Straight Lift Jack



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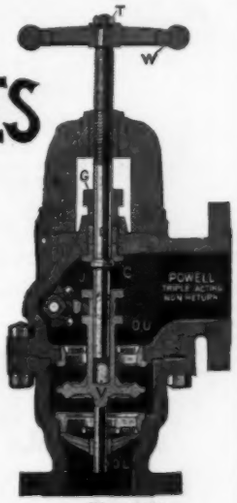

Fig. 2228

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Texas Panhandle Wildcats

CARSON COUNTY — American Refining Co.'s Burnett 3, set 8-inch cas with packer 2980 ft. J. Crosbie et al's Burnett 1, std 2850 ft. Culbertson et al's V. B. Armstrong 1, set cas 3265 ft. Gates Oil Co.'s Burnett 1, sd 3020 ft. Gulf Production Co.'s Burnett 5, ur 2800 ft; Burnett 6, dr 1840 ft; Burnett 7, dr 410 ft; Burnett 1-A, completing as gas well, td 3510 ft. Marland Oil Co.'s Burnett 1, sd 2850 ft. Olson Bros. et al's Burnett 1, sd 2500 ft. Premier Oil Corp.'s Burnett 1, dr 2075 ft. W. W. Silk et al's Burnett 3, second hole, co 2999 ft. Skelly Oil Co.'s Burnett 2, sd 2950 ft. The Texas Co.'s Burnett 5, dr 2090 ft.; Mary C. Burnett 2, fighting cave 2750 ft.

COTTLE COUNTY—T. J. Woodley et al's A. Dulaney 1, sd 2700 ft.

GRAY COUNTY—A. R. Anderson's C. W. Bradford 1, dr 1610 ft. C. H. Clark et al's Coombs & Worley 1, sd 2650 ft. Danciger Oil & Ref. Co.'s J. B. Bowers 1, dr 465 ft. Frank Dillard's John Henry 1, dr 3300 ft. W. H. Holmes' J. S. Morse 2, co 2400 ft. Wilcox Oil & Gas Co.'s Coombs & Worley 1, dr deeper 2965 ft; J. H. Wilson 1, dr 3600 ft.

HUTCHINSON COUNTY — Amarillo Oil Co.'s L. Bivens 2-B, sd 2650 ft. H. G. Barnum et al's Johnson 1, set cas 2860 ft. Dixon Creek Oil Co.'s H. C. Smith 1, set cas 2878 ft. Douglass Oil Co.'s J. A. Whittenberg 1, trying to kill gas, td 3000 ft. J. H. Middleton's John Weatherly 1, cable tool rig. New Domain Oil Co.'s W. S. Christian 1, sd 300 ft. Prairie Oil & Gas Co.'s Diana Shaw 1, dr 2920 ft. Twin Six Oil Co.'s W. L. Kingland 1, sd for cas 3000 ft. Western Enterprise Oil & Gas Co.'s Smith-Capers 1, sd 3050 ft. J. W. Wilson et al's Whittenberg 1, fsh tools, 2910 ft.

KING COUNTY—W. G. Trammell et al's Spikes 1, rigged up.

MOORE COUNTY — Amarillo Oil Co.'s Masterson 1, second hole, dr 1740 ft.

POTTER COUNTY—Amarillo Oil Co.'s L. Bivens 3-A, dr 760 ft; W. H. Bush 1, sd 3490 ft; J. C. Warrick 1, dr 2465 ft.

ROBERTS COUNTY — Phil Engle et al's Mrs. Ledrick & Sons 1, sd 1730 ft.

WHEELER COUNTY — Mid-Continent Oil Synd.'s Ember 1, sd 500 ft. W. D. Shedden et al's B. F. Westmoreland 1, sd 480 ft. J. Whittington's Williams & Laycock 2, setting 6¾-inch cas with packer, td 2190 ft.

San Antonio District Wildcats

COMPLETIONS

Company, Well and Location	Initial Production Bbls.	Depth
Jim Hogg County—		
Kitselman & St. Albaus' No. 1	500	....
No. 3	500	....
R. V. Hill's No. 1	2½	180
Plateau Oil & Gas Co.'s No. 1	500	....
Witherspoon Oil Co.'s Holbein 1	300	....
Holbein 2	500	....
Magnolia Pet. Co.'s No. 2	350	....

DRILLING REPORT

ATASCOSA COUNTY—DeLange-Eiser Co.'s Tom 2, dr 3975 ft. Texacosa Oil & Gas Co.'s Peeler 1, dr 1685 ft. Tripps Drilling Co.'s

McAda 1, coring 1600 ft. Rutledge et al's Kaufman 1, dr 900 ft.

BEXAR COUNTY—Aviator's Swearingen 1, dk. J. M. Davis et al's Koch 1, cored at 1450 ft. F. B. Slick's No. 1, dr. White & Hampton's Swearington 1, sd.

DUVAL COUNTY — Co-Operative Drilling Co.'s Dinn 1, sd 2070 ft. Mesquite Oil Co.'s No. 1, setting liner. Hill-Pierce Corp.'s Martinez 1, dr. Cole Pet. Co.'s No. 6, set casing at 2463 ft.

GUADALUPE COUNTY — J. K. Hughes Dev. Co.'s Allen 20, no report. Allen Burman's Wade Battle 1, dr below 2000 ft. Magnolia Oil Co.'s No. 13 and 14, dr. Sight et al's Springs 1, dr 1950 ft. Ross & Green's Pryor 1, set casing. Rutledge's Pryor 1, set casing and preparing to test. Stebbins Oil & Gasoline Co.'s Lenz 1, dk. Jennings et al's Lynch 1, sd 2250 ft. Flick et al's Weinert 1, set casing. Walhunda Pet. Co.'s Smith 1, sd 2075 ft. Mid-Kansas Oil & Gas Co.'s Edna Krueger 1, dr 1303 ft.

JIM HOGG COUNTY — Kitselman & St. Albaus' No. 1, blk 36, sur 15, producing 500 bbls; 3, producing 500 bbls. Buchanan et al's No. 2, rigging up. Simms Oil Co.'s Wood 1, sur 84, dr. Plateau Oil & Gas Co.'s No. 1, producing 500 bbls; 2, dr 1895 ft; 3, set casing at 1983 ft; 4, dr 1620 ft; 5, dk. Buffam et al's No. 1, blk 28, sur 15, dr 1715 ft. Russell-Hoffman's David Vela ranch 1, dk; Givens 1, rigging up. Alworth Bros.' No. 1, blk 38, sur 15, sd 2051 ft. Big Bend Oil Co.'s Martinez 5, cemented 6⅝-inch cas at 1900 ft; 6, dr 1050 ft; 7, 8 and 9, dks. San-Tex Oil Co.'s No. 1, sur 262, dk. Mirando Oil Co.'s No. 11, dr 1950 ft. J. W. Pippin et al's No. 1, sur 51, sd 2547 ft. Magnolia Oil Co.'s Thompson 1, dr deeper; 2, producing 350 bbls; 3 and 4, dks. Weber Oil Co.'s Holbein 4, sd 2781 ft. R. V. Hill's No. 1, producing 2½ bbls daily at 180 ft. Lang et al's No. 1, coring below 2177 ft. Henne-Winch-Farriss' No. 7, dk. Shasta Oil Co.'s Holbein 1, sd 2504 ft. O. W. Killam's Martinez 2, dr 1991 ft. Witherspoon Oil Co.'s Holbein 1, producing 300 bbls; 2, producing 500 bbls.

LIVE OAK COUNTY—Grubstake Investment Assn.'s Nichols 3, no report. Texas Co.'s Reagan 2, dr. Glasco & Fallin's Tip 1, sd 600 ft. Southern Natural Gas Co.'s Nos. 9, dr, 10, lcn. Coquet et al's Hicks 1, dr.

ZAPATA COUNTY—H. J. McMullen's Nos. 1, 2 and 3 Serapio Vela, lcns. R. K. Bateman et al's No. 1, sur 617, dr below 1960 ft. Mirando Oil Co.'s No. 16, sur 307, sd 2020 ft. Killam Interests' No. 1, sur 307, set casing at 1664 ft. Hill et al's Haynes 1, dr. Pamuco Prod. Co.'s Vela 1, dr below 400 ft.

Kansas Wildcats

BARBER COUNTY—R. D. Brown's No. 1, NWc SW NE 33-30-14w, sd 3741 ft.

BARTON COUNTY—Cheyenne Oil Co.'s No. 1 Sooy, SWc SW 27-18-12w, sd 3525 ft. Haynes et al's No. 1, NWc 21-12-12w, sd 2100 ft. Mountain States Oil Co.'s No. 1, SEc NE 22-18-3w, dr 3765 ft. Huffine et al's Smith ., C NE SW 21-19-12w, dr 1375 ft.

CLARK COUNTY—Watchorn Oil & Gas Co.'s No. 1 Morrison, SEc NE NE 2-22-1w, sd 4928 ft.

COFFEY COUNTY—Sunbeam Pet. Co.'s No. 1 Andrew, NWc NE 30-20-15, rig. Manhattan Oil Co.'s Elliott 1, NWc SW 14-33-13, sd 350 ft. Braden Bros.' Beyer 1, SEc NW 13-22-13, spd and sd.

CLOUD COUNTY—Livingston et al's Murdock 1, NEc 7-6-4w, sd 365 ft.

FINNEY COUNTY—Garden City O. & G. Co.'s Wann 1, SEc SE 36-21-20, sd 2890 ft.

GEARY COUNTY—Liberty-Texas Oil Co.'s Wright 1, NEc 9-12-6, sd 750 ft; Foster 1, NEc SW 3-12-6, sd 2000 ft.

GOVE COUNTY—Keyes Bros. & Marine's Unknown 1, NWc SW 23-13-26w, lcn.

GRAHAM COUNTY—Keyes Bros. & Marine's Taxton 1, SEc NW 23-8-24w, sd 2000 ft.

JEFFERSON COUNTY—Northern Counties' Edwards 1, SEc NW NW 13-8-9, sd 340 ft.

KINGMAN COUNTY—Hale et al's Graber 1, SWc NW 34-27-7, sd 2543 ft.

LIGHTNING
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PUMPING POWERS, JACKS, STUFFING BOXES, ETC.

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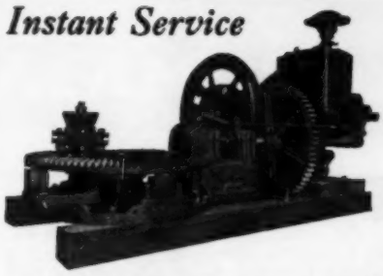

More Power—Less Vibration
They Are Correct in Design
Husky Enough to Do the Job Right

The reliable eccentric motion does away with jerky lines.
Built in three sizes:
No. 4—Belt Drive, weight 6500 lbs. For deep wells.
No. 2—12 H. P. engine, weight 4600 lbs.
No. 1—6 or 8 H. P. engine, weight 3200 lbs.
Turntable gear is easily removable and having a broad face, coarse teeth and large diameter will stand up to the heaviest loads.
SHACKLE LINES SET LOW TO THE GROUND (13 in.) ELIMINATE EXCESSIVE STRAIN. QUICKLY INSTALLED
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KANSAS CITY HAY PRESS COMPANY
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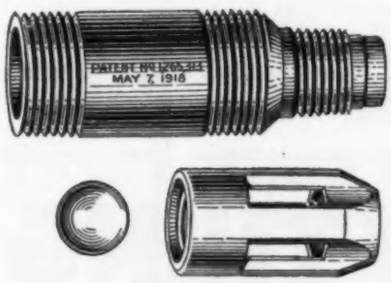

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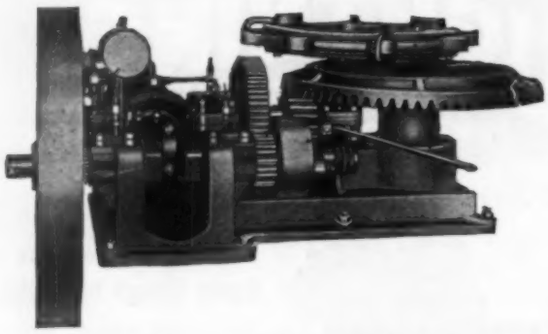

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A combined gas engine and single eccentric pumping power, with a 10½-H.P. Gas engine, positive governor, gravity feed lubrication and Wico ignition for gas or gasoline equipment. In refinement of construction and efficiency and simplicity of operation this is the best power of its kind on the market. Will satisfactorily operate four two-thousand-foot wells. Price, $650.00.

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PEDEN IRON & STEEL CO.

HOUSTON SAN ANTONIO
FT. WORTH SHREVEPORT

LABETTE COUNTY—Ark Fuel Oil Co.'s Sparks 1, NEc SE SE 14-31-17, sd 1100 ft.

LINCOLN COUNTY—Berry & Rosenthal's Lambert 1, C NW 31-12-10w, fsh 3258 ft. Amerada Pet. Corp.'s Crawford 1, NEc SW SE 16-11-7w, sd 2875 ft. Equity Oil Co.'s Jellison 1, NWc SE 19-13-9w, sd 2790 ft. Scott & Collins' Stone 1, SEc SW NE 19-11-6w, sd 500 ft.

NEMAHA COUNTY—Nemaha O. & G. Co.'s No. 1 Meyers, NWc 19-3-11, sd 3250 ft.

OSAGE COUNTY — Rodgers & Bittle's Bertha 1, SEc NW 22-17-16, lcn. Mul-Vit Dev. Co.'s Neil 1, NEc NW SW NE 8-17-17, sd 2735 ft. Baker et al's No. 1, C SE SE 3-10-14, sd 260 ft.

POTTAWATOMIE COUNTY—Crawford et al's Stewart 1, C E L SE SE SE 17-19-12, rig; Greishabert 1, SWc SE SE SW 8-17-17, rig; St. Mary 1, SWc 11-1-12, sd 2290 ft.

RICE COUNTY—Stamey's Barnes 1, SEc NE 21-20-6w, sd 3075 ft. Jasper & Beschka's Walker 1, SWc NE 10-18-6w, sd 2200 ft.

RILEY COUNTY—Pawnee O. & G. Co.'s Marks 1, SEc NE NW 26-10-6, sd 2030 ft.

ROOKS COUNTY—Keyes Pet. Co.'s Sandon 1, NW SW SE 7-8-20w, spudded and sd.

RUSSELL COUNTY — Pomeroy et al's Cooper 1, SEc 33-12-11w, dr 2575 ft. Alcorn Oil Co.'s Sellers 1, SEc 36-15-12w, sd 3510 ft.

SALINE COUNTY—Thrall et al's No. 1, SEc NE NW 15-15-4w, sd 1010 ft.

SEWARD COUNTY—C. T. Dev. Co.'s Woods 1, NWc NE 34-34-34, sd 700 ft. Seward O. & G. Co.'s Selsey 1, NEc NW 2-33-33, sd 2427 ft.

TREGO COUNTY—Keyes Pet. Co.'s Walsh 1, NWc SE 5-11-25w, sd 1450 ft; Walsh 2, SWc NE SW 5-11-25w, sd 1550 ft; Davis 1, NEc SW 16-11-24w, fsh 3030 ft.

WABAUNSEE COUNTY—Williams et al's No. 1, NEc SW 9-5-5, sd 3600 ft.

WILSON COUNTY — Rhodes & French's Brown 1, NWc SW NW 2-27-14, dr 805 ft.

Oklahoma Wildcats

ALFALFA COUNTY—McGinnis & Ward's Watts 1, C NE SW 21-27-10w, sd 3504 ft. Armstrong, Henley, Piffles' Turnbull 1, C NW SE NW 25-24-11w, co 2700 ft.

ATOKA COUNTY — McPhearson et al's Wild 1, SWc NW 7-2-9, sd 4323 ft. Henson et al's Dabney 1, C SE NW 17-4-11, sd 2260 ft. J. P. Torrance et al's Fee 1, SWc NE 1-2-9, sd 2235 ft, hfw. Wapanuka Dev. Co.'s Underwood 1, C W L SE SE 28-2-9, sd 1343 ft.

BLAINE COUNTY—Meyers et al's Chronister 1, SEc NW NW 7-18-15w, sd 965 ft. Okomo Oil Co.'s Ekleman 1, SWc 21-13-10w, sd 2610 ft.

BRYAN COUNTY—Alexander's Hampton 1, SEc NE 26-7-11, sd 1400 ft.

CANADIAN COUNTY — Thos. Revelle's Dawson 1, SEc 34-13-9w, dr 2955 ft. Carroll et al's Setter 1, SEc 2-13-8w, sd 100 ft. Wilcox et al's Sanders 1, C NE NE NE 29-11-7w, rig.

CLEVELAND COUNTY—Garr Oil Co.'s Holland No. 1, NEc SE 31-10-4, sd 2620 ft.

CUSTER COUNTY—Hoover Oil Co.'s No. 1, NWc SE 34-13-14w, fsh 2510 ft.

GRANT COUNTY—Embry et al's Edwards 1, C SE SE NW 20-26-4, sd 1000 ft. Midwest & Gulf's Moon 1, NEc NW 8-27-8w, sd 2490 ft. Frank Traver et al's Fuss 1, SWc NW NW 3-27-4w, sd 1250 ft.

GREER COUNTY—Neal et al's Johnson 1, SEc NE NW 3-7-22w, dr 1245 ft. Boss & Terrill's Van Victor 1, C SW SW 4-3-22w, r 2578 ft. Morton & Neil's No. 1, SWc NE NE 17-7-21w, sd 1230 ft.

HUGHES COUNTY—Mathers & Skelly's McClain 1, C SW SW 4-5-11, sd 3206 ft. Dixie Oil Co.'s Irvine 1, SW NW SE SE 18-8-10, r 3110 ft. Walton, Snyder & Marshall's Kiles 1, C E L NE NW 8-6-10, dr 2065 ft.

JEFFERSON COUNTY—Connell Oil Co.'s Anderson 1, SEc NE 31-4-8w, sd 2280 ft. Landis et al's Standfield 1, SEc 33-7-6w, sd 2350 ft. Barker et al's Major 1, C SE SW 34-5-6w, spudded and sd. Godley Oil Co.'s Woodworth 1, C NE NW 36-5-4w, sd 495 ft.

W. E. Norton's Unknown 1, SEc SE 7-5-9w, rotary rig. Cherry & Coush's Seay 1, NEc NW NW 4-7-5w, sd 1390 ft. C. R. Heacock's Cox 1, NEc SE 17-5-8w, lcn.

KAY COUNTY—Day Oil Co.'s Vandatta 1, SWc NW 8-26-2w, set casing td 4525 ft. Hickman & Barnhart's Sheets 1, C NW SW SE 25-29-2w, sd 835 ft.

KIOWA COUNTY—Connor et al's No 2, NEc NW NW 34-7-16w, run 10-inch 976 ft. Aubynne Oil Co.'s No. 1, SWc NE 3-7-17w, sd 3004 ft. Alcorn Oil Co.'s No. 1, NEc SE SE SW 13-7-16w, dr 1665 ft.

LINCOLN COUNTY—P. & R. Corp.'s Hainzig 1, SWc NW NW 14-13-6, dr 2600 ft. Douglas Oil Co.'s Ewing 1, NWc 7-13-3, sd 2965 ft. J. C. Cook's Richardson 1, SWc NW SW 8-12-5, dr 2910 ft. Eugene Coste & Co.'s Ross-Fortune 1, SEc NW 26-12-2, dr 3140 ft. Wilcox O. & G. Co.'s Smith 1, SEc SW NE 12-12-3, fsh 2467 ft. F. O. Howarth's Harris 1, SEc NE 22-15-2, dr 3100 ft. Santrock Drilling Co.'s No. 1, SEc NW NW 17-15-3, sd 920 ft. Ruby et al's Cull 1, NEc NW 36-15-4, dr 3106 ft.

LOGAN COUNTY—Skelly Oil Co.'s Newman 1, NWc NW 32-19-3w, sd 2450 ft. Franklin Oil Assn.'s Moore 1, NWc SE SE 35-17-4w, sd 2130 ft. McMunn & Nixon's Fields 1, SWc NE SE 35-17-4w, rig. Haley & Pioneer Pet. Co.'s Quair 1, SWc SE 33-18-3w, moving in tools. Blackford O. & G. Co.'s Lair 1, C S L N½ SE 28-16-1w, fsh 750 ft. Gilliland Oil Co.'s Ohm 1, C NW 5-19-2w, fsh 3050 ft. Magnolia Pet. Co.'s Pritchard 1, NWc 23-15-1s, dr 3200 ft.

LOVE COUNTY—Driller Syndicate Oil Co.'s Wilson 1, NWc SE 11-7-2w, sd 2830 ft. Simms Oil Co.'s Starritt 1, SEc NE SE NE 26-6-3w, co 2332 ft.

MAJOR COUNTY—Texas Prod. Oil Co.'s Basin 1, SWc 6-22-14w, spudded and sd. Bradstreet Oil Co.'s Ratcliffe 1, C SW 9-22-9w, sd 3630 ft. Frantz & Slick's Gray 1, C NW 36-21-11w, sd 1000 ft.

PONTOTOC COUNTY—Harper et al's Dener 1, NWc SE SE 19-6-7, fsh 3000 ft. Smith et al's Norris 1, SWc SE 34-4-6, co 2430 ft. Riverside Oil Co.'s McFarland 1, NWc NE NW 4-5-5, r 650 ft. C. J. Wrightsman's Floyd 1, SWc NW NE 24-4-4, casing trouble 2720 ft. Galloway et al's Hays 1, NEc SE NW SW 13-3-6, sd 1160 ft. Craig et al's Starritt 1, NWc NE 5-4-5, sd 600 ft. Brinson et al's Brown 1, SEc SW SE 32-5-5, dr 1010 ft. American O. & R. Co.'s McDaniels 1, SEc NE SW 3-4-6, r 1600 ft.

OKLAHOMA COUNTY — Firestone Oil Co.'s School 1, NWc SE 36-11-3, sd 4479 ft.

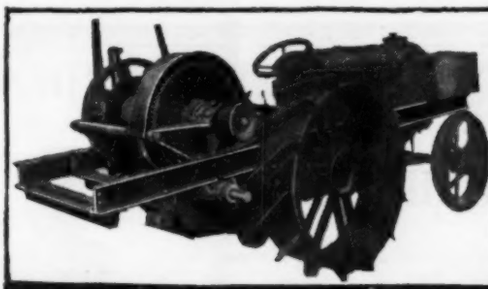
POTTAWATOMIE COUNTY—Ossie Oil Co.'s Howell 1, SWc NE 17-10-2, sd 3250 ft. Davis Detrick's McGathey 1, SEc 10-6-2, sd 3850 ft. H. C. Guinnup et al's Floyd 1, SWc SE 12-11-3, sd 3670 ft. North American Oil Co.'s Madgett 1, NWc 25-10-4, sd 460 ft. Maud Oil Products Co.'s Yinson 1, NEc SW 18-7-4, co 2935 ft. McMann Oil Co.'s Neghan 1, SWc NW 19-7-4, sd 100 ft. Halmond Osmond et al's Fiddler 1, SEc NW 4-5-5, sd 545 ft.

ROGERS MILLS COUNTY—Twin Hills Oil Co.'s McClure 1, NWc 15-16-26w, sd 4310 ft. Trio Oil Co.'s No. 1, SEc NW SW 3-13-26w, co 3060 ft.

SEMINOLE COUNTY — Maxwell et al's Charty 1, C NE NW 33-6-6, co 2275 ft. Link Oil Co.'s Carolina 1, C SE NW 14-6-7, sd 2840 ft. T. B. Slick's Sanny 1, SWc 19-6-7, dr 4145 ft. Wm. McDougal's Dindy 1, C SW SW 30-6-7, run 5-inch 3427 ft. R. F. Garland's Farlin 1, C NE NW 6-6-18w, fsh 1390 ft. Keener O. & G. Co.'s Harjo 1, C SE SE NW 14-11-7, rig. Gillette et al's Cudjo 1, C NE NE SE 35-9-6, sd 3961 ft. Transcontinental Oil Co.'s Davis 1, NE SE 22-7-7, dr 1810 ft.

WASHITA COUNTY—McCoy et al's Praeters 1, C SW SW NE 9-8-15w, sd 3115 ft.

WOODS COUNTY—Victor Oil Co.'s Van Buskirk 1, SWc SE 10-25-15w, sd 960 ft.



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10,000	"	8¼"	32 "	"	"
6,000	"	10"	40 "	"	"
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1,000	"	15½"	70 "	"	"
250	"	20"	90 "	"	"
20,000	"	4"	used	line	pipe
20,000	"	6"	"	"	"
30,000	"	8"	"	"	"

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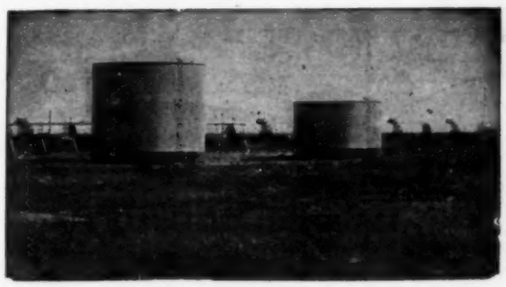

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Louisiana Wildcats

COMPLETIONS

Company, Well and Location	Initial Production Bbls.	Depth
Bossier Parish—		
Atlantic Oil Prod. Co.'s Bodcau Lumber 2, 24-23-12	*	2636
Caddo Parish—		
Richardson Oil Co.'s Bickham 1, 15-18-15	*	2000
Bostick 1, 11-18-15	*	1009
Calcasieu Parish—		
Southern Exploration Co.'s Clooney 1, 2-10-9	*	4223

DRILLING REPORT

ACADIA PARISH—Denman et al's Chapiens 1, 56-10-1e, rig.

ASCENSION PARISH—Empire Gas & Fuel Co.'s United Sand Co. 1, 22-10-4e, dk.

BIENVILLE PARISH—Roxana Pet. Co.'s Bryan 1, 30-17-6, dr 2250 ft.

BOSSIER PARISH—Arkansas Nat. Gas Co.'s Bolinger 1, 32-23-11, dr 500 ft; Prince-Horton 1, 30-16-11, set 10-inch 1785 ft. Coker et al's Rhodes 1, 31-21-11, set 12½-inch 130 ft. Ferral et al's Atkinson 1, 4-18-12, sd 50 ft. Thigpen & Herold's Bernstein 1, 11-20-13, to resume dr 1320 ft. Wetherbee et al's Holland 1, 4-22-11, dr 1190 ft.

CADDO PARISH—Flournoy et al's Simpson 1, 8-6-15, bldg dk. Fortuna Oil Co.'s Mitchell 1, 17-18-16, dk. Haynes Bros.' Louisiana L. S. & P. Co. 1, 8-19-16, set 10-inch 1185 ft. Proven Prod. Co.'s Agurs 1, 6-16-16, set 6-inch 1917 ft. Stith et al's Pitts 1, 11-23-16, sd 600 ft. The Texas Co.'s Jeems Bayou 1, deep test, 15-20-16, to set 6-inch 3500 ft.

CALCASIEU PARISH—Marland Oil Co.'s United Sand Co. 1, 15-10-9, dr 1850 ft. Roxana Pet. Co.'s Hunter 1, 22-9-11, dr 2000 ft. Vacuum Oil Co.'s Bordages 1, 9-10-9w, dr 4400 ft, showing oil; Farquhar 1, 9-10-9w, fsh for bailer at 2280 ft, showing oil.

CALDWELL PARISH—Culver et al's Culver 1, 21-14-4e, sd 3130 ft.

CAMERON PARISH—Pure Oil Co.'s North American Sand Co. 1, 12-13-8w, dr 100 ft.

CLAIBORNE PARISH—Claiborne-Lincoln Synd.'s Fields 3, 22-19-5, sd 2208 ft. Clark & Melat's Heard 1, 5-21-6, rig. El Dorado Chief Oil Co.'s McElwee 1, 13-22-7, sd 3018 ft in sand. Evans et al's Taylor 1, 5-19-5, set 6-inch 2572 ft.

DE SOTO PARISH—Daniels & Roscoe's Pollack 1, 36-11-24, sd 2948 ft. Tarver et al's Conley 1, 2-14-10, dr 1800 ft. Ulrey et al's Deas 1, 23-11-12, lcn; Bishop-Robertson 1, 22-11-12, ratholing 2830 ft. Wright et al's Sutherland 2, 19-12-14, sd 2614 ft.

GRANT PARISH—Grant Parish Pet. Co.'s Ball 2, 1-7-1w, rig sd.

LA SALLE PARISH—Bur-Ban Oil Co.'s Urania 2, 21-11-2e, sd 2095 ft. Columbia O. & G. Co.'s Urania Lumber 1, 22-10-2e, sd 200 ft. Gulf Ref. Co.'s Urania 1, 22-11-2e, dk; Urania A-1, 22-11-2e, to set 8-inch 1360 ft. Stovall Drlg. Co.'s Louisiana-Central Lumber 2, 27-10-2e, dr 1715 ft. Urania Pet. Co.'s Urania Lumber Co. 5, 18-10-2e, dr 1480 ft.

LINCOLN PARISH—Buckner et al's Barrett 1, 13-20-3w, sd 1220 ft.

NATCHITOCHES PARISH—R. O. Roy & Co.'s Ballard 1, rig.

OUACHITA PARISH—Dickson & Frue's Goodwin 1, 24-18-2e, dr 2475 ft. J. P. White et al's Jones 1, 6-16-5e, set 8-inch 560 ft.

SABINE PARISH—Emlet et al's Bowman-Hicks Lumber 4, 8-7-12, dr 1115 ft; Bowman-Hicks Lumber 5, 9-7-12, dr 940 ft.

ST. MARY PARISH—Danenbaum Oil Co.'s LeBlanc 1, 25-13-9e, sd 2063 ft. Glen-Wild Oil Co.'s Pharr 1, 22-15-12, dr 2180 ft.

UNION PARISH—Jones & Walker's Feazel 1, 6-19-2e, r 2428 ft, to set casing and test Woodbine sand. Simms Oil Co.'s James 1, 16-22-3w, dr 1425 ft.

WEBSTER PARISH—Belchic & Laskey's Martin 1, 34-23-10, dr 1820 ft. Fortuna Oil Co.'s Nickerson 1, 23-23-10, dr 1350 ft. Pine Woods Lumber 6, 27-23-10, set 10-inch 200 ft. Kinnedy et al's Ambrose 1, 19-20-10, dk. McDowell et al's Hortman 1, 15-20-10, to set 6-inch 2510 ft. Louisiana Oil Ref. Corp.'s

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Armor 1, 21-23-9, dr 2750 ft. Palmer & Blount's Mason 1, 20-18-10, rig. The Texas Co.'s Lewis 1, 25-23-10, rig.

VERMILLION PARISH— United O. & G. Co.'s LeBlanc 1, 63-12-5e, dr 3115 ft.

WINN PARISH—Galloway & Arrendale's McCarty 1, 6-12-1w, sd 1600 ft. Grant Pet. Co.'s Selman 1, 14-11-1w, dr 300 ft. Hall et al's Eagle 1, 6-10-2w, set 10-inch 200 ft.

Arkansas Wildcats

BRADLEY COUNTY—Rhodes et al's McQuistian 1, 36-12-9, sd 225 ft.

CLARK COUNTY—Southern Drilling Co.'s Burrows 1, 35-10-20, sd 714 ft.

COLUMBIA COUNTY—Arkansas Fuel Oil Co.'s Hardy 1, 1-19-22, dr 10-inch plug and tested fresh water 738 ft; to deepen. Hargis et al's Souter 1, 24-17-22, sd 35 ft. Heath Trust's Williams 1, 1-19-21, sw, sd 2175 ft. Johnson et al's Sailles 1, 18-17-22, sd 915 ft. Kemp et al's Emerson 1, 7-19-19, sd 2260 ft. Ky-Ark Pet. Co.'s Doss 1, 29-19-20, sd 650 ft. Magnolia Development Co.'s Lindsey 1, 30-18-19, dr 500 ft. Magnolia Pet. Co.'s Watson 2, 36-15-20, deep test in Stephens Field, dr 2890 ft. Meier et al's Gantt 1, 15-17-22, dk. Moore et al's Fullenwilder 1, 12-17-22, sd 2252 ft. Phillips et al's Davis 1, 14-18-21, to set 6-inch 2730 ft.

DALLAS COUNTY — Durr et al's Riggs-Matlock 1, 33-8-15, sd 2400 ft.

DREW COUNTY—Graves et al's Karnes 1, 20-14-6, dr 2420 ft. King & Wilson's Trotter 1, 12-13-6, sd 1250 ft. Rhodes et al's Harrison 2, 5-13-8, sd 2307 ft. Spooner et al's Meyer 1, 4-16-17, sd 50 ft.

GRANT COUNTY—Arnold & Hill's Meeks 1, 8-14-11, dk. Haley & Evans' Pike 1, 8-6-11, sd 50 ft.

HEMPSTEAD COUNTY—Grassy Lake Oil Assn.'s Gun Club 1, 27-12-27, dr 1050 ft. Hempstead Oil Co.'s Nicholls 1, 17-11-25, sd 1980 ft. Wooten et al's Walker 1, 23-11-24, dr 560 ft.

LA FAYETTE COUNTY — Ken-Saw Pet Co.'s Red River Valley Lumber 2, 3-20-24, sd 1386 ft.

LINCOLN COUNTY—Bennett et al's Jones 1, 33-10-6, dk. Cambrian et al's Fee 1, 3-9-8, sd 1850 ft.

LITTLE RIVER COUNTY—Gaines et al's Thomas 1, 16-13-29, sd 3787 ft. Grote et al's Allen 1, 2-13-29, dr 2370 ft. Johnson et al's Hawkins 1, 10-11-31, sd 1350 ft.

MILLER COUNTY—Dock Nigh's (Norton) Thomas 1, 12-20-28, sd 1275 ft.

NEVADA COUNTY—Garrett et al's Snell 1, 10-12-23, dk. Humble O. & R. Co.'s Pitts 1, 8-15-22, rig. Smitherman & McDonald's Womack 3, 10-14-21, sd 2500 ft. Zingg et al's Groves 1, 22-10-23, sd 1605 ft.

OUACHITA COUNTY — British Allied Synd.'s Larkin 1, 6-13-18, sd 1410 ft. Bray & Hawthorne's Copenhagen 1, 13-14-17, testing 2530 ft. Reynolds & Thompson's Graves 1, 16-14-18, coring 2080 ft.

UNION COUNTY—Berry et al's Union S. M. 1, 14-19-11, sd 1770 ft. Bradley & Carzort's Pate 1, 16-17-17, rig. Liberty Oil Co.'s Davis 1, 31-16-14, dry 2171 ft. Mathews et al's Teele 1, 11-19-12, set 6-inch 2620 ft. O'Brien et al's Fee C-1, 13-19-17, dr 2790 ft.

PATENTS OBTAINED FOR INVENTORS
JACK A. SCHLEY
U.S. PATENT ATTORNEY
305 INTERURBAN BLDG., DALLAS

DAVID DONOGHUE
Geologist and Engineer
Appraisals and Geological Reports
West Building, Houston, Texas

PATENTS
Patents Obtained, Trade Marks, Patent Causes
JESSE R. STONE
Formerly Assistant Examiner United States Patent Office
Andrews, Streetman, Logue and Mobley
12th Floor Union N. Bk., Houston, Texas

Maurice Hirsch & Allen Hannay
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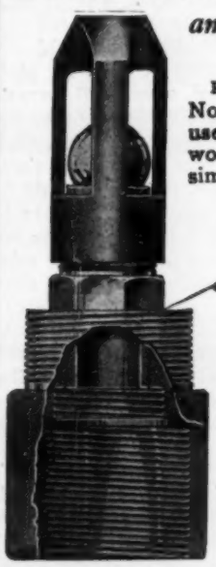
R. H. Fash, B. S., Vice-President
828½ Monroe St., Ft. Worth, Tex.

TEXAS OIL MAPS
County and District
Catalog on Application
HEYDRICK MAPPING COMPANY,
Wichita Falls, Texas

Adams Combination Cuff and Standing Valve
Patent No. 1353303

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Oklahoma Oil Industry Safety Code

(Continued from page 31)

(a) The bracket type, the brackets of which may be of steel or wood.

(b) The ledger board type, which is of wood construction and which is supported from the ground or floor.

Order No. 19 — Standard Erection Brackets (Steel).

Standard erection brackets of steel shall be constructed as follows: The angles shall be not lighter than 1¼-1¼x¼-inch angle iron material.

Order No. 20 — Standard Erection Brackets (Wood).

(a) Minimum specifications on tanks of over 5500 barrels capacity, which are constructed of steel 3-16-inch thickness or heavier. Uprights supported from shell of tank shall consist of not lighter than 4x4 inch or equivalent lumber, which shall be notched to receive inclined brace or support of bracket. The top of horizontal support of scaffold shall consist of not less than two pieces of not lighter than 1x6 inch material, placed edgewise and securely bolted together. Inclined brace or support of bracket shall consist of not lighter than 2x4-inch material.

(b) Minimum specifications on tanks of 5500 barrels or less capacity, excluding tanks of 250 barrels or less capacity: Upright horizontal support and inclined brace shall be not less than 2x4-inch lumber.

Order No. 21—Securing Brackets to Tank.

(a) On tanks of over 5500 barrels capacity, brackets shall be secured to shell of tank by at least two ⅝-inch steel bolts or one ¾-inch steel bolt, provided that if a single bolt is used it shall be placed not less than 8 inches nor more than 12 inches from top of bracket, with two extra heavy washers.

(b) On tanks of 5500 barrels or less capacity, brackets shall be secured to shell of tank by at least one ⅜-inch steel bolt with two heavy washers.

Order No. 22—Width of Scaffold.

(a) All scaffolding or working platforms for tanks of over 5500 barrels capacity where steel cable or other approved handrails are not provided, shall be composed of not less than three boards, 2x12 inches, or four boards 2x 10 inches or five boards 2x8 inches in width. Where steel cable or other approved handrails are provided, the minimum width of working platforms shall be 30 inches.

(b) On working platforms on tanks of 5500 barrels or less capacity, all scaffolding shall be of not lighter than 2x8 inch boards.

Order No. 23—Scaffolding Specifications.

(a) On tanks of over 5500 barrels capacity, the minimum width of boards shall be 8 inches; minimum thickness of boards shall be 2 inches; and shall be made to lap on brackets at either end not less than 6 inches.

(b) On tanks of 5500 barrels or less capacity, the minimum width of the boards shall be 8 inches; minimum thickness of boards shall be 1 inch; scaffolding boards shall be made to lap on brackets at either end not less than 6 inches.

Order No. 24—Planks Lap and Bearing.

Scaffolding planks shall have direct bearing and overlap support not less than 6 inches. When necessary to butt planks, end of butting planks shall be provided with independent support and securely fastened.

Order No. 25—Clearance Between Brackets.

The clearance between brackets shall not exceed 9 feet.

Standard Specifications for Construction of Ledger Board Type of Scaffolding for Use in the Erection of Steel Tanks, Constructed of 3-16 Inch Steel or Heavier.

Order No. 26—Risers or Uprights.

(a) Risers and uprights shall be of not lighter than 2x8 inch material.

(b) The clearance between risers or uprights shall not exceed 9 feet.

Order No. 27—Width of Scaffolding.

All scaffoldings or working platforms for tanks of over 5500 barrels capacity where steel cable or other approved handrails are not provided, shall be composed of not less than three boards 2x12 inches, or four boards 2x10 inches, or five boards 2x8 inches in width. Where steel cable or other approved handrails are provided the minimum width of working platforms shall be 30 inches.

Order No. 28—Planks Lap and Bearing.

Scaffolding planks shall have direct bearing and overlap support not less than 6 inches. When necessary to butt planks, ends of butting planks shall be provided with independent supports and securely fastened.

Standard Specifications for the Construction of Spiral Runways to Be Used in the Erection of Steel Tanks.

In the erection of steel tanks, and other spherical structural work, one of three safe means shall be provided for reaching scaffold and other working levels, viz:

(a) Inclined Spiral Runways.
(b) Ladders.
(c) Stairways.

Order No. 29—Width of Spiral Runways.

Spiral runways shall be not less than 16 inches wide. Single planks in these runways shall be not lighter than 2x8 inches.

Order No. 30—Cleats.

When the incline exceeds 1-foot rise in a 4-foot run, the runway shall be provided with cleats placed not more than 12 inches apart.

Order No. 31—Risers of Uprights.

Spiral runways shall be supported on either side by risers of not lighter than 2x6 inch material, spaced on not more than 9-foot centers.

Order No. 32—Planks Lap and Bearing.

Planks of spiral runways shall have direct bearing and over-lap support not less than 6 inches. When necessary to butt planks, ends of butting planks shall be provided with independent supports and securely fastened.

Order No. 33—Guards for Spiral Runways.

All outside edges of spiral runways shall be equipped with hand rails as specified in paragraph 1-(c) of part one, except that the height of the rail shall be 36 inches.

Standard Specifications for Material to Be Used in the Construction of Steel Ladders for the Erection of Steel Tanks.

Order No. 34—Rungs.

On tanks of over 5500 barrels capacity, each rung of every ladder shall be supported by side rails at each end. Ladders made by nailing cleats across a single rail shall not be used.

Order No. 35—Spacing.

Rungs of ladders shall be spaced not more than 18 inches apart.

Order No. 36—Securely Placed.

All ladders shall be secured to prevent displacement by one or more of the following methods, or an equally safe method: (1) By using a cleat in front of ladder feet; (2) By nailing ladder feet to floor; (3) By using steel points at ends of ladder feet; (4) By using cork, rubber, corundum, or other shoes secured to the feet of ladders; (5) By lashing ladders at the top.

Order No. 37—Goggles.

Employes engaged in riveting, chipping, caulking and other work where there is danger of flying particles, should be provided with safety goggles.

Standard Specifications for the Construction of Stairways to Be Used in the Erection of Steel Tanks.

Order No. 38—Standard Stair Construction.

(a) Stairs must be free from winders.

(b) All stair treads must be equal in width and all risers must be of equal height in any one flight.

Order No. 39—Standard Specifications for Handrails for Open and Closed Stairways.

Stairway handrails must be 36 inches high, measuring from center of tread, and made of not lighter than 1 inch standard pipe or 1x1x3-16 inch angle iron, or 2x4 inch lumber, supported on uprights of equivalent dimensions, spaced on not more than 10 foot centers.

PART IV

Drilling Operations

Order No. 40—Rotary Drilling Rigs.

(a) On both sides of the draw

works, guards of heavy metal shall be provided for drive chain from the engine to the main drive shaft and from the main drive shaft to and including the sprocket on the rotary table. Guards shall be constructed of not lighter than 12 gage metal.

(b) On every shaft drive rotary, the drive pinion, the shaft, the coupling, and the bevel gears shall be completely enclosed and guarded with metal shields.

(c) The pump end of every rotary hose shall be fastened to the derrick, and the other end of the hose shall be fastened to the gooseneck, or to the swivel bail with a chain or with a wire cable.

(d) The key seat and projection key on every cathead shall be cut off or covered with a smooth thimble.

Order No. 41—Walking Beams.

At every well being drilled with a rotary rig the walking beam shall be kept outside of the derrick, except when necessary or expedient to alternate between rotary and standard methods of drilling.

Order No. 42—Fly Wheels of One-Cylinder Engines.

No engine fly wheel shall be weighted with other than the balancing rims provided for that purpose, and then never in excess of rated capacity.

Order No. 43—Boiler Relief Valves.

Every steam boiler shall be equipped with 2 relief valves. The fuel feed line shall approach boilers at right angles from direction of boiler setting.

Order No. 44—Belt House.

In every belt house used as a runway, the engine drive belt shall be guarded from the calf wheel jack post to the engine belt wheel, in accordance with specifications 1-(a), 1-(b), or 1-(c), of part one.

Order No. 45—Loose Material in Derricks.

Tools, machine parts, or material of any kind shall not be kept in a derrick above the derrick floor, unless there is occasion for their immediate use, and then adequate precaution shall be taken to prevent their falling on employes below.

Order No. 46—Traveling Blocks and Hooks.

(a) Every traveling block shall be provided with handle or handhold on each side similar to a "U" bolt or ⅝-inch rod iron and securely rivited or bolted to outside housing of sheaves. Every traveling block shall be equipped with a safety at top of blocks with holes for cable to pass through before it reaches or travels to sheaves in order to protect workmen from having hands or fingers drawn in between sheaves and cable.

Special Notice—Paragraph (a) of Order No. 46 shall not apply to existing installations.

(b) Every drill pipe, casing, tubing and sucker rod hook shall be of a type with a latch or guard to prevent the elevator links and other equipment becoming accidentally disengaged from

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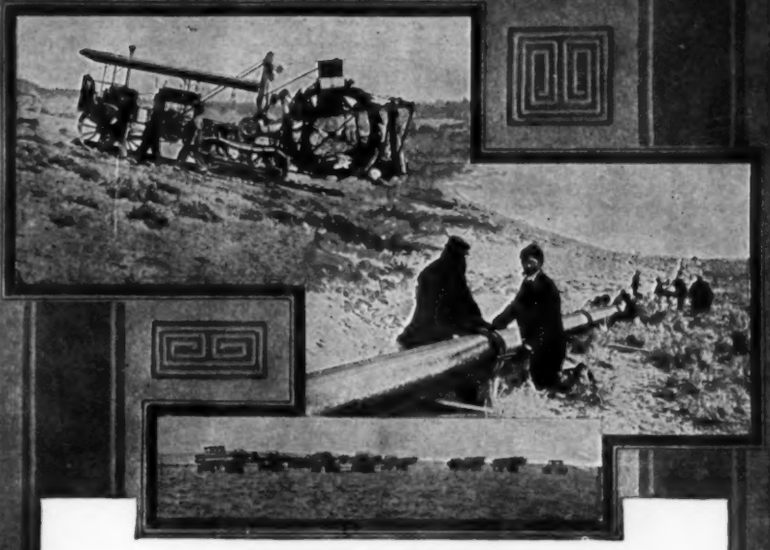

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the hook. The safety latch or guard must be of an approved type, or elevator links and other equipment shall be securely chained or cabled to hook.

Special Notice: Paragraph (b) of Order No. 46 shall not apply to existing installations.

Order No. 47—Belt House Ladders.

(a) On every derrick, a ladder extending from the derrick floor level to the belt house roof runway shall be provided as follows:

(b) The stringers shall be of 2x4 inch structurally sound lumber, or equivalent.

(c) If the sampson post brace be utilized as a ladder stringer, the other ends of the rungs shall be supported by another stringer.

Order No. 48—Ladders.

(a) Ladders on every derrick hereafter constructed shall be provided from the floor to the water table as follows:

(b) The stringers shall be of at least 2x4 inch structurally sound lumber or equivalent. The tops and bottoms of the ladder sections shall be fastened to the derrick girts with bolts, and the ladder stringers shall terminate 3½ feet above the water table.

Special Notice: Paragraph (b) of Order No. 48 shall be applicable only to rotary drilling rigs.

(c) The rungs shall be of 1x4 inch structurally sound timber, or equivalent uniformly spaced not to exceed 18 inches on centers and shall be securely fastened to the stringers. The width of the ladder shall not be less than 12 inches in the clear between the stringers.

(d) The rungs shall be not less than 4 inches from the girts or other derrick members.

(e) Over the rungs near the end thereof, shall be fastened securely, strips of structurally sound lumber, or two-strand galvanized or copper twisted wire, or equivalents, of ample strength and secured so that the rungs cannot be pulled off.

(f) At no point shall a ladder lean back from the vertical.

Order No. 49—Calf Wheel Tie Rods.

Every calf wheel head-board shall be tied to the main sill with an iron or steel rod, not less than ⅞ inch in diameter, or with a wire cable having a turnbuckle.

Special Notice: Paragraph (a) of Order No. 49 shall be applicable to rotary rigs only.

Order No. 50—Pipe Hooks.

(a) A pipe hook shall be provided for the use of every workman when handling pipe on a derrick floor.

(b) Every pipe hook, if used above a derrick floor, shall be secured to the derrick with a rope in such a manner as to prevent the hook from falling.

(c) **Pipe Hooks and Break-out Tongs:**

Every rotary rig shall be provided with a break-out line of suitable length fastened to the tools so they cannot be detached.

Special Notice: Paragraphs (a), (b) and (c) of Order No. 50 shall be applicable only to rotary drilling rigs.

Order No. 51—Derrick Crown Platforms and Railings.

On every derrick hereafter constructed for rotary drilling, a platform of steel or heavy lumber at least 2 feet wide shall be provided around the edges of the derrick crown. This platform shall be equipped on its outer edges with a standard hand rail as specified in specifications 1-(a), 1-(b), and 1-(c) of part one and with a toe board at bottom of rails as specified in specification 3-(a).

Order No. 52—Outside Derrick Platforms for Drilling Rigs.

Every derrick hereafter constructed for rotary drilling shall conform to the following requirements:

(a) A platform shall be provided completely around the derrick, and level with the quadruple board, or with the principal working platform.

(b) A platform shall be provided completely across the ladder side of the derrick and level with each auxiliary platform other than the principal working platform.

(c) The width of platforms shall be not less than 24 inches; platforms shall be provided with openings to permit the passage of men climbing derrick ladder; the outer edges of the platforms shall be equipped with standard handrails as specified in specifications 1-(a), 1-(b), or 1-(c) of part one.

Order No. 53—Inside Derrick Platforms.

(a) The double (kelly) board, the triple board, the quadruple (fourable) board and each drill pipe platform in every rotary derrick shall completely cover the space from the working edge of the platform back to the legs and girts of the derrick.

(b) The decking plank on the working side of each platform shall be secured to the derrick girts.

Order No. 54—Electric Wiring.

(a) Where electric wiring is used on derricks it shall be placed in conduits or strung on insulated knobs; lights shall be enclosed in heavy wire mesh and vapor proof globes.

(b) All electric light sockets in and around any drilling rig where gas or gasoline vapor might be present shall be vapor proof with standard keyless sockets.

Order No. 55—Finger Boards.

On all rotary rigs there shall be required a finger board at fourable platforms, and every finger board shall be secured to the derrick by a safety wire or cable attached to the outer end of the finger.

Order No. 56—Gin Poles.

(a) The gin poles at the crown of every derrick hereafter constructed or reconstructed shall have two uprights and a cross beam.

(b) The clearance between the water table and the cross beam shall be not less than 7 feet.

Order No. 57—Cellar Exits.

At every drilling and redrilling well having a cellar there shall be a ladder extending from the cellar bottom to the derrick floor, unless some other safe exit is provided.

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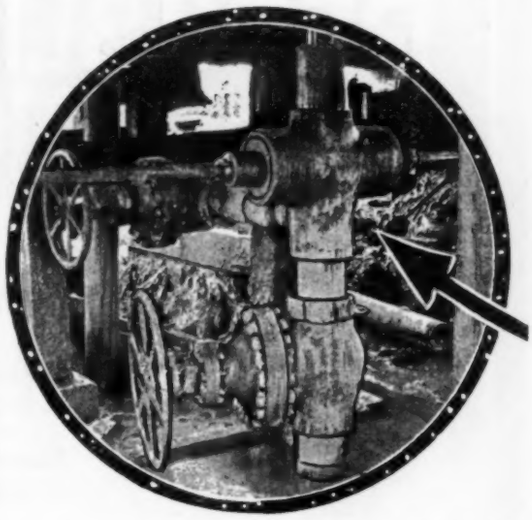

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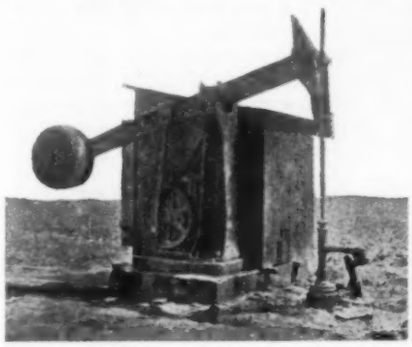


straight pull on the rods at all times. For wells up to 2000 feet in depth all outfits have cast iron frames; for wells over 2000 feet a steel frame is used.

The outfit can be furnished with either gas, gasoline, kerosene, oil engines, or electric motor, and with also a belt or gear drive. If desired the outfit can be furnished mounted on skids or on wheels, making a complete portable pumping unit which can be moved from one well to another.

Hoisting drums can be furnished. These are readily attached and can be used for pulling rods or tubing.

The Oil Well Supply Company, 213-15 Water Street, Pittsburgh, Pennsylvania, will give more information upon request.

Engineering in 1924

Engineering Achievements for 1924 have recently been published by the Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pa.

This booklet takes up advances made by the Westinghouse Company in different kinds of electrical equipment and shows pictures to illustrate improvements. A section of the booklet is devoted to equipment for the oil fields.

Copies will be sent to any one interested.

Galvanized Casing Makes Hit in California Fields

Considerable interest is being manifested in the recent introduction of Emsco Galvanized Oil Well Casing, in California fields.

The Emsco Company has evolved a process that enables it to galvanize casing to the extent that it is said to resist deterioration of rust, alkali and other natural chemicals encountered both in and out of the hole. The method of construction is such that results in a smooth inner wall free from indentations that might interfere with the progress of tools and gage-size cement plugs.

Each length of casing is 28 feet, made up of seven inner and outer layers, and is tested under high pressure before being released from the factory.

A special method is used for assembling each four-foot joint of the outer layers and so interlocking them, along with compressing inner and out layers, as to make them inseparable, even up to the tensile strength of the steel. By this method a very tough joint is obtained, resulting in uniform roundness and straight sections.

A special grade steel with high carbon content is used for the inner liners.

The Emsco Steel Products Company, 7111 S. Alameda St., Los Angeles, California, will send further particulars upon application.

Transit Pump Bulletin

Transit steam pumps, duplex direct acting, outside center packed and general service are described in bulletin No. 104-A, issued by the National Transit Pump and Machine Company, Oil City, Pennsylvania.

All specifications of these pumps are included in the bulletin, copies of which may be had for the asking.

Dunn Combination Hook Has Special Safety Features

A combination safety rod and tubing hook capable of carrying a load of 45 tons is the latest equipment offering of the Dunn Manufacturing Company, Oxnard, California.

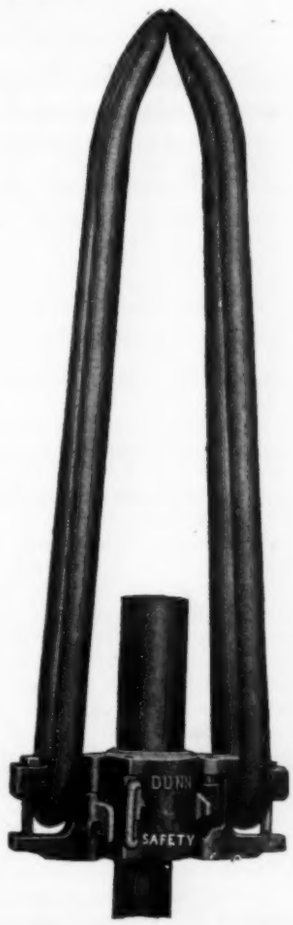
In spite of the great strength of the hook, it is light enough and so easy to handle that unusual speed is obtained in handling even the lightest string of tubing, as stated by the manufacturers.

The thrust from the weight of the string is borne on a ball bearing swivel, giving an easy pivot at all times. The hook is hinged to the shank, and when in working position the hook and shank lock together automatically. Jarring, jerking, or dropping will not open the hook.

Maximum safety is secured by the trigger-grip for the operator. This grip is a safety latch completely protected from every outside influence.

Elevator balls on the safety hook are of the single-link or double-link type, according to the desires of the purchaser.

The Dunn Manufacturing Company, Oxnard, California, will suppy additional details.



The OIL WEEKLY will print on this page data on new oilfield equipment, improvements on old equipment, news of new catalogs, bulletins, etc. This department is handled exclusively by the editorial department and has no connection with the advertising department. Data will be carried on anything which the editorial department thinks of interest to our readers, regardless of whether or not the manufacturer is an advertiser in the The OIL WEEKLY.—Publisher.

Manufacturer and Supply Dealer Notes

Left to right, back row: J. J. Kelly, Ranger; G. D. Michaelson, Wichita Falls; Adolph Honegger, Eldorado. Second row, left to right: J. D. Stubblefield, Breckenridge; D. E. Martin Arkansas district manager; Marshall A. Fuglaar, Olney; Francis H. Miller, Houston; J. G. Michaelson, Dallas. Bottom row: C. D. Erlewine, general district manager, Houston.

Marion Machine Men Meet in Sales Conference at Dallas

Dallas, Texas, Feb. 4.—District managers of the Marion Machine Foundry and Supply Company, Marion, Indiana, were called together for a sales conference at the Jefferson Hotel, January 17, and plans for 1924 were outlined in an enthusiastic meeting. C. D. Erlewine, general district manager for the Southwest, presided at the meeting, and read a message from the general manager, H. L. Erlewine, who was unable to be present.

In a greeting address Mr. Erlewine explained how the company has grown and touched upon prospects for the coming year. He also stated how the capital allotted to his district would be used in carrying on the work of the company.

The method of managing the Marion Machine Foundry and Supply Company is unique. The operating capital of the company is divided into six units, and each unit is allotted to a general district manager. The general district manager is free to use the capital as he sees fit in order to make the best turnover possible. He allots so much capital to each district manager with which to conduct the store in his territory.

This throws the responsibility of the capital directly on the district managers in charge of the different stores, and these managers are in turn responsible to the general district manager, who accounts to the general manager of the company for the capital used.

District managers of Texas, Louisiana and Arkansas were included in the meeting, and each manager reported conditions in his division. All were confident of a prosperous year ahead.

The Marion Machine Foundry and Supply Company was organized at Marion, Indiana, in 1902 and has grown since that time until it now has more than 20 stores throughout the United States.

About one-half the company's output of machinery is for oil fields, the other half consisting of general industrial equipment and special grades of cast iron and brass.

In addition to the regular business routine excellent talks were made by G. C. Johnson, Chicago manager of the Quaker City Rubber Company, and C. F. Parker, general manager of the mechanical goods department of the Goodyear Tire and Rubber Company, Atlanta, Georgia.

After the business was finished those attending the conference were entertained at a banquet and theater party.

Those in attendance were: C. D. Erlewine, general district manager for the Southwest territory; James D. Stubblefield, Breckenridge district; J. J. Kelly, Ranger; G. D. Michaelson, Wichita Falls; Marshall A. Fuglaar, Olney; J. G. Michaelson, Dallas; Francis H. Miller, Mexia; D. E. Martin, Eldorado, Arkansas, and Adolph Honegger, Mexia, supervisor of gas engines.

Officers of the company in Indiana are: C. C. Chamberlin, president; H. L. Erlewine, secretary and treasurer.

Bulletin on Compressors

Straight line steam and power driven compressors are shown in bulletin 720, published by the Chicago Pneumatic Tool Company, 6 E. 44th St., New York City.

The bulletin gives a lengthy and complete description of the compressors with many cuts and cross-section drawings to illustrate details of construction.

Copies will be mailed to any one interested.

Wichita Oil Man Makes Tour

Houston, Texas, Feb. 4.—Amos Mitchell of the M. & V. Oil Company, and the M. & V. Tank Company, Wichita Falls, visited friends in Houston last week.

Mr. Mitchell recently made a 1600-mile auto trip through many of the oil fields of the state, and many of the potential districts, and is very enthusiastic over the possibilities of future development in Texas.

He is just as enthusiastic about the future of the M. & V. Tank Company, and will soon have some announcements of interest to his friends and to oil producers everywhere.

Baker Specialties Catalog

Baker Oil Well Specialties are featured in a catalog published by the Baker Casing Shoe Company, Coalinga, California.

The Baker line of specialties consists of casing shoes, shoe guides, rotary hole guides, back-pressure valves, float collars, drill pipe floats, die nipples and collars, clean-out bailers, special cement dump bailers, cement retainers, special cement baskets, sure-shot cement plugs, bridge builders, expansion wall hooks, spiders, wall packers, compensating tubing slips, heaving plugs, metal pitmans and fish-tail bits.

Special binding makes the catalog easy to preserve and gives it durability.

Copies will be sent upon request to the company for Catalog B.

Louisiana Man Buys Tank Concern in Houston

Houston, Texas, Feb. 4.—In order to serve the oil trade more efficiently, M. A. Stanton of Shreveport, La., has bought the Petroleum Tank Company, Houston, and will operate his tank service from this place. His establishment will be known as The Cypress Tank Company.

Mr. Stanton has maintained field tank service for several years in Arkansas and Louisiana and is known throughout the fields in this part of the country as "Mike the tank man." Until he bought the Houston plant his headquarters have been at Shreveport.

His service will include steel and wood tanks for oil fields, and will extend to the South Texas fields.

J. W. Adams has been named as general foreman of all machine and blacksmith shops of the Murray Tool & Supply Company of Cleveland, Oklahoma, with branches throughout Oklahoma.

Quality
You Can Depend On

The efficiency of your operating equipment depends in as great a measure on the character and quality of the lubricants used, as it does on the type of the equipment itself and the skill of the operating personnel.

Humble Lubricants are specially refined so as to maintain the right lubricating body on bearings which operate under high speeds, as well as on those which carry heavy loads.

Humble Oils retain the proper viscosity and hold their fluid film at the operating temperatures produced by high speeds, and they have sufficient "oiliness" to leave a semi-plastic, adsorbed film which protects the bearing surfaces from abrasion during periods of partial lubrication, especially bearings like those of line shafts, countershafts and machine tools, which are started and stopped frequently and are often subjected to peak loads.

This "oiliness" quality of Humble Oils, and their ability to hold an adsorbed film, during periods of partial lubrication, protect against abrasion, overheating, and bearing failures.

There is a Humble Oil which is specially prepared for every bearing need, whether in your plant, in your trucks, or in your automobile.

HUMBLE OIL & REFINING CO. HUMBLE OILS HOUSTON, TEXAS

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HOUSTON, TEXAS

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Say you saw it in The Oil Weekly

LETTERS OF Paul Peebles P.S.G.

mi deer cleopatry

well cleo hunny I hav not had no ansers yet 2 the ?air whitch I sent out last week whitch I sent yu a copy of, so I gess I am 2 astoot for the talent in the oil bizness. it is hard sumtimes hunny for me 2 make miself understood among them on account I am inclined 2 be tecknical on account of the reseerch werk & reedin whitch I hav 2 do on account of mi perfession.

yu see hunny I sent all them ?aires 2 oil co presidents whitch is all kinder dum. I no because I hav tried & tried 2 git2 sea sum of them from time 2 time & they alwaze make excuses about not wantin 2 sea me whitch is a sine that they do not want 2 match wits with me. why hunny yu wood be susprised. the way they werk is that they hav got them a buntch of men whitch they call clerks, etc., 2 reed all the male & whenever they want 2 rite a letter well they tell a girl what they want 2 say & she rites it for them & then they make sum marks on the bottom whitch is supposed 2 be there name but whitch noboddy wood gess was that. them is the kinder fellers hunny whitch is all the time bein smart with me. I aint no oil co pres. but I can read mi own letters & rite them 2 & when I sine mi name ennyboddy what can read can reed it.

well hunny evryboddy in the oil bizness is feelin pretty good now on account of the prise of oil goin up & of corse they are all gittin reddy 2 drill there fool heds off so that they can git the prise back down agin. I gess they wood not be happy if they cood not be sayin they was starvin 2 deth on account of low prises. but all the same whenever they do git a good prise they all think they are the onliest ones that can drill a few extry wells & git moar oil. but hunny I hav notised that it aint no one man or one co. ever had a corner on increasin there perduckshun & when 1 is doin it they are all tryin.

but the prise of oil aint no never mind 2 me on account I git a flat royyalty from mi oil properties whether it is enny prise 2 it or not & the checks cums in reglar like mi paw told the feller at the bank for them 2 cum. of corse all the munny the old man gits tied up in the bank will mabe be sum of mine in the future in case I can beet mi step maw out of it. hunny I aint sed nuthin about her or yore maw either in a long time & I am pretty happy not werryin about them, so I gess the less I say about them the better. I am shore glad thow hunny that it aint but 1 like either 1 of them in the werld. yu is certenly difrent from them hunny, whitch is the reesen I like yu.

wimmins is funny things hunny. sumtimes I think I no all about them & then I see difrent. forinstants the other day I was down town lookin for a plase 2 park and mabe I was rong but ennyway a woman in a ford car run rite slam bang in2 me from the side and busted a spoak in 1 of mi wheels & for a minnit I did not no if yu was goin 2 be a widder when yu git married or not. but I got out 2 see what was rong & told her 2 pull back whilst I lifted mi car up. then I told her it was alrite about what she had did 2 me, but she sed what was I goin 2 do about pullin her fender loose. well hunny she had run in2 me, so what did I care about what it done 2 her. but I did not want 2 be argerin with her rite there in the middle of the street so I giv her a card with mi name on it & told her 2 call me up. & then she tried 2 git me arested for jellybeanin her. this shore is a funny werld, hunny.

I seen the other day where Rthur napp was makin cross werd puzzles so I desided that I wood make 1 2. now I see why he does it for a pass time. it is because they will keep yu awake & he lives in Fillerdelpha. me & the land lady where I bordes was fixin up a cross werd puzzle the other nite & we stayed awake on it till 2 oklock in the mornin & thought we had gotten it done but we had a hole lot moar cross werds in the mornin when she got 2 herryin me 2 git up and git out from there.

we also had a few cross werds in the evenin on account she & me hav got sum difrent ideers how 2 spell werds & she tride 2 make me beleev that a diskshunry whitch she had showed the only way it is 2 spell werds. what it is is a book whitch her boy studies at skule & they are gittin sum advanse ideers about spellin whitch aint like I spell and besides that a hole lot of werds whitch I no the meenin of aint in no books. hunny I will draw yu up a cross werd sum times 2 show yu what I meen while the widder aint helpin me, because I no that yu wood not want me 2 send yu 1 whitch she had helped me with.

I wood a cum down 2 sea yu sundy hunny escept that it looked like rain in the mornin & was sutch a pretty day in the afternoon that I had 2 take the widder ridin. also it is about gittin 2 the time of the yere when she will be wantin me 2 git bussy plantin sum flowers in the yard like I had 2 do last yere. but things is difrenter now hunny from what they was then. yu remember that in them days I was hard up for cash & was behine with mi bord so that I kinder had 2 do whatever she sed, but now I am all pade up with her & got munny besides so she can dig her own flower beds or git them dug. mi paw did not raze me 2 be no flower farmer.

well hunny I am sorry 2 report that I am not gittin along mutch good about diggin mi tunnel down 2 mine gravity on account it is a strupenderous propersishun whitch takes time. it will mabe cost a hole flock of milyun dollars 2 do it rite, so al I hav did so far is 2 pick out a good plase 2 start it. it is on top of a hill. of corse I wood hav that much moar start if I was 2 put it at the bottom of the hill but I figger that it will be handy 2 dump the dirt down the side of the hill. yu see hunny I no mi stuff, even if I aint never had no preevus experents in diggin tunnels 12 miles down in the ground, only the way I am goin it will be about 18 miles I judge without figgerin it reel clost. I can measure how long it is after it is dug.

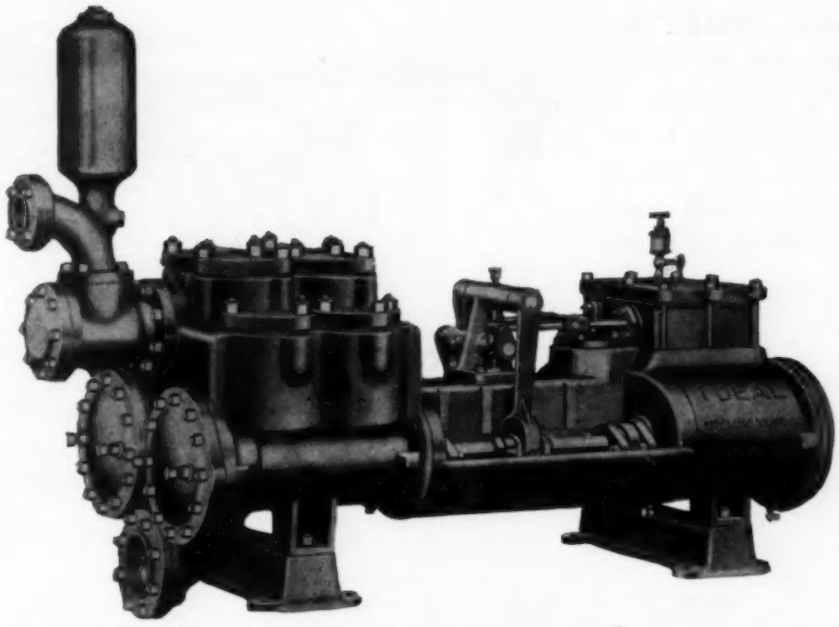
1 thing that is holdin me back is gittin a patent on mi gravity motter. yu see hunny I cant make it so it will work without a sample of gravity 2 werk with & I cant git no gravity till I dig the tunnel. & if it wont work like I think it will it aint no use 2 dig the tunnel. sum folks mite want 2 see it dug just for the fun of it, but it is a reesen for evrything I do, & mostly a money reesen if it is enny werk attached.

hunny I no that yu are disapinted that I do not git the time 2 cum down 2 sea yu, but dont yu werry hunny I will git around 2 it sum of these days & we will git married just as soon as I can git things shaped up & we can figger sum way 2 git rid of yore maw buttin in.

yore lovin paul.

IDEAL

DUPLEX SLUSH PUMPS



10 x 5¾ x 12 inches
12 x 6¾ x 12 inches
12 x 6¾ x 14 inches

RUGGED CONSTRUCTION

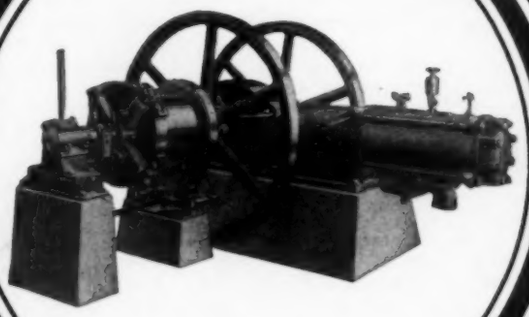
RELIABLE SERVICE

LONG LIFE

THE CHARACTERISTICS THAT MAKE IDEAL PRODUCTS THE STANDARD OF THE OIL FIELDS

The National Supply Companies

Say you saw it in The Oil Weekly



FRANKLIN
VALVELESS ENGINES

IN the FRANKLIN the "valveless" feature eliminates the cause of many of the troubles found in other engines of this type. Smooth running, equipped with reversible or one-way clutch, it can be started easily and quickly by one man in any kind of weather. They are of the enclosed type and employ the splashing oil system thus saving 75% of lubricating oil over the open type engines using oil cups. FRANKLINS are made from 15 to 60 H. P. inclusive.

Write for descriptive Bulletins and Quotations

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Air Compressors—
Continental Supply Company
Hope Engineering & Supply Co.
Southern Engine and Pump Co.

Air Lift Pumping Equipment—
Sullivan Machinery Co.

Attorneys—
Hirsch & Hannay
Vinson, Elkins & Wood

Balls and Seats—
Bradford Motor Works
Continental Supply Company
Norris Bros.
The Charles N. Hough Mfg. Co.

Band Wheels—
Continental Supply Company
Emsco Steel Products Co.
International Derrick & Equipment Company
Lee C. Moore & Co., Inc.
Parkersburg Rig & Reel Co.

Bell Nipples—
The Cunningham Co.

Belting—
Bridgeport Machine Company
Continental Supply Company
Frick-Reid Supply Company
Gustin Bacon Manufacturing Co.
International Supply Company
Oil Well Supply Company
Republic Supply Co.
Stanley Belting Corp.

Boilers—
Bridgeport Machine Co.
The Brownell Co.
Continental Supply Company
Frick-Reid Supply Co.
International Supply Co.
The National Supply Cos.
Oil Well Supply Company
Republic Supply Company
Regan Forge & Engineering Co.
Star Drilling Machine Co.
Titusville Iron Works Co.
United Iron Works, Inc.
See Oil Field Supplies and Tanks

Boiler Tubes—
The Tyler Tube & Pipe Co.

Boiler Scale Remover—
Ward Chemical Co.

Blowout Preventer—
Baash-Ross Tool Company
Cameron Iron Works
Continental Supply Company
Regan Forge & Engineering Co.

Burners—
Continental Supply Company
Gaso Pump & Burner Mfg. Co.
Gould Burner Company
Regan Forge & Engineering Co.

Bull Wheels—
Continental Supply Company
International Derrick & Equipment Company
Lee C. Moore & Co., Inc.
Parkersburg Rig & Reel Co.

Calf Wheels—
Continental Supply Company
International Derrick & Equipment Company
Lee C. Moore & Co., Inc.
Parkersburg Rig & Reel Co.

Casing—
Continental Supply Company
Regan Forge & Engineering Co.
Republic Supply Company
Superior Tube Co.

Casing Shoes—
Baker Casing Shoe Co.
Bridgeport Machine Co.
Continental Supply Company
The National Supply Cos.
Pelican Well Tool & Supply Co.
Regan Forge & Engineering Co.
Republic Supply Company
W-K-M Company

Cement Hardener—
The Sullivan Company
W-K-M Company

Cement Head—
MacClatchie Mfg. Co.

Chain Blocks—
Yale & Towne Mfg. Company

Chain—
Baldwin Chain Co.
Chain Belt Co.

Charcoal Iron Boiler Tubes—
The Tyler Tube & Pipe Co.

Collapsible Rotary Bits—
O. M. Carter

Control Heads—
Continental Supply Company
Palmer Specialty Co.
Southern Brass Mfg. & Plating Co.

Core Drills—
Acme Oil & Drill Company
O. M. Carter
Elliott Core Drilling Co.
Spengler Core Drilling Co.

Compressors—
Butler Mfg. Company
Continental Supply Company
F. W. Heitmann Co.
Hope Engineering Company
Sullivan Machinery Co.
United Iron Works, Inc.

Cordage—
Continental Supply Company
The National Supply Cos.
Republic Supply Company

Crown Blocks—
Baash-Ross Tool Company
Continental Supply Company
International Derrick & Equipment Company
Lufkin Foundry & Machine Co.
Oil Well Supply Company
Parkersburg Rig & Reel Co.
Superior Tube Co.

Couplings—
Continental Supply Company
Harrisburg Pipe & Pipe Bending Company
A. O. Smith Corporation
Superior Tube Co.

Dehydrating Processes—
Wm S. Barnickel Co.
Petroleum Rectifying Co.

Derricks and Rigs—
International Derrick & Equipment Company
Lee C. Moore & Co.
National Turnbuckle Derrick Co.
Parkersburg Rig & Reel Co.
Peden Iron & Steel Co.
Robertson-McDonald Lumber Co.
Superior Tube Co.

Diamond Core Drills
Sullivan Machinery Co.
R. S. Patrick

Disc Bits—
Continental Supply Company

Ditchers—
Barber-Greene Co.
Buckeye Traction Ditcher Co.

Draw Works—
Continental Supply Company
Lufkin Foundry & Machine Co.

Drilling Cables—
American Cable Co.
Bridgeport Machine Co.
D. F. Connolly Agency
Continental Supply Company
Frick-Reid Supply Company
The National Supply Cos.
Peden Iron & Steel Co.
Regan Forge & Engineering Co.
Republic Supply Company
Star Drilling Machine Co.
Wickwire Spencer Steel Corp.
Williamsport Wire Rope Co.

Drill Pipe Slips—
Baash-Ross Tool Company
Continental Supply Company

Drilling Machines—
Bridgeport Machine Co.
Continental Supply Company
Keystone Driller Co.
Parkersburg Rig & Reel Co.
Star Drilling Machine Co.

Drill Collars—
Baash-Ross Tool Company
Continental Supply Company

Drill Pipe Cutting—
Baash-Ross Tool Company
Houston Engineers, Inc.

Drilling Tools—
Acme Fishing Tool Co.
Baash-Ross Tool Company
Continental Supply Company

Drill Pipe—
Continental Supply Company
Frick-Reid Supply Co.
Republic Supply Company
Reading Iron Company
Superior Tube Company

Drilling Equipment—
Baash-Ross Tool Company
Bridgeport Machine Co.
Continental Supply Company
Republic Supply Company
Star Drilling Machine Co.

Drive Pipe—
Continental Supply Company
Republic Supply Company
Reading Iron Co.
Superior Tube Co.

Electrical Equipment—
Westinghouse Elec. & Mfg. Co.

Elevators—
Bridgeport Machine Company
Continental Supply Company
The Cunningham Company
Dunn Mfg. Co.
Gulf Coast Machine & Supply Co.
LeBus Rotary Tool Works
Wilson & Willard Mfg. Co.

Engines, Diesel—
Western Machinery Co.

Engines, Gas—
Climax Engineering Co.
Continental Supply Company
Frick-Reid Supply Co.
Hope Engineering & Supply Co.
Spence Machine Co.
The Pattin Bros. Co.
Western Machinery Co.

Engines (Gasoline or kerosene)—
Climax Engineering Co.

Engines, Oil—
Continental Supply Company
Frick-Reid Supply Co.
The Pattin Bros. Co.
Western Machinery Co.

Engines, Pumping—
Ajax Iron Works
Bessemer Gas Engine Co.
Bridgeport Machine Co.
Climax Engineering Co.
Continental Supply Company
The Brownell Co.
De La Vergne Machine Co.
Franklin Valveless Engine Co.
Frick-Reid Supply Co.
Hope Engineering Co.
Lucey Mfg. Corp.
Lufkin Foundry & Machine Co.
The National Supply Cos.
National Transit Pump & Machine Company.
Oil Well Supply Co.
Peden Iron & Steel Company
Republic Supply Company
Rock Island Plow Co.
Spence Machine Co.
Southern Engine & Pump Co.
Titusville Iron Works
Western Machinery Company

Engineers—
David Donoghue
Foster & Reiter
Hope Engineering & Supply Co.
Lee C. Moore & Co.
Oil Conservation Engineering Co.
D. T. Ring

Fire Protection—
Continental Supply Company
Oil Conservation Engineering Co.

Fish Tail Bits—
Continental Supply Company
Frick-Reid Supply Company
Lucey Manufacturing Corp.
Pelican Well Tool & Supply Co.
Regan Forge & Engineering Co.
W-K-M Co.

Floor Circle Brace—
Continental Supply Company
Dunn Mfg. Co.

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Gulf Refining Company
Sinclair Refining Company

Gas Engines—
S. M. Jones Company

Gas Traps—
Continental Supply Company
Lorraine Corp.
Smith Separator Company
Trumble Gas Trap Co.

Gasoline Extraction Compressors—
Bessemer Gas Engine Co.
Continental Supply Company
Hope Engineering & Supply Co.
Sullivan Machinery Co.

Gasoline and Oil Storage Tanks—
Butler Mfg. Co.
Graver Corporation
Continental Supply Company
Kansas City Struct. Steel Co.
Parkersburg Rig & Reel Co.

Gauges—
Continental Supply Company
Oil Conservation Engineering Co.

Genuine Wrought Iron Casing—
Reading Iron Co.
Superior Tube Co.

Geologists—
Alexander Deussen
David Donoghue
Edwin B. Hopkins
Foster & Reiter
Heath M. Robinson

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J. P. Ratigan
W-K-M Co.

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Hope Engineering & Supply Co.

Hoists—
Alamo Iron Works
Emsco Steel Products Co.

Hose—
Continental Supply Company
Gustin Bacon Manufacturing Co.

Houses—
Crain Ready-Cut House Co.

Laboratory Equipment—
Continental Supply Company
Fort Worth Laboratories

Lapwelded Steel Boiler Tubes—
The Tyler Tube & Pipe Co.

Lighting Systems—
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Continental Supply Company
Westinghouse Elec. & Mfg. Co.

Line Pipe—
Continental Supply Company
Republic Supply Co.
Reading Iron Co.
Superior Tube Co.

Lumber—
Robertson-McDonald Lumber Co.

Manufacturers—
Robinson Packer Co.

Maps—
Heydrick Mapping Co.

Meters—
Continental Supply Company

Motors—
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Westinghouse Elec. & Mfg. Co.

Oil Field Supplies—
Bridgeport Machine Co.
Butler Mfg. Co.
Continental Supply Company
The Cunningham Company
Frick-Reid Supply Co.
Graver Corporation
Erle P. Halliburton
International Supply Company
Kansas City Struct. Steel Co.
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Lucey Manufacturing Corp.
The National Supply Cos.
Oil Well Supply Company
Parkersburg Rig & Reel Co.
Peden Iron & Steel Co.
Pelican Well Tool & Sup. Co.
Republic Supply Company
Regan Forge & Engineering Co.
Robinson Packer Co.
Smith Separator Company
Southern Brass Mfg. & Plating Co
Superior Tube Co.
United Iron Works, Inc.
W-K-M Co.

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Republic Supply Company
Superior Tube Co.

Oil Well Cementing—
Erle P. Halliburton

Oil Well Shooting—
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Zero Hour Torpedo Co.

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Continental Supply Company
LeBus Rotary Tool Works

Packers—
Continental Supply Company
The Guiberson Corp.
Layne & Bowler
Robinson Packer Co.
Pelican Well Tool & Supply Co.
Regan Forge & Engineering Co.
W-K-M Co.

Packing—
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Gustin Bacon Manufacturing Co.
Frick-Reid Supply Co.
The National Supply Cos.
Peden Iron & Steel Co.
Pelican Well Tool & Sup. Co.
Republic Supply Company

Paints—
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Peden Iron & Steel Co.

Panel Boards—
Westinghouse Elec. & Mfg. Co.

Patents—
Hardway & Cathey
Jack A. Schley
Jesse R. Stone

Pipe Grips—
Continental Supply Company
W-K-M Co.

Pipe—
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Continental Supply Company
W. E. Detlor
Frick-Reid Supply Co.
F. W. Heitmann Co.
Harrisburg Pipe & Pipe Bending Company
International Supply Co.
The National Supply Cos.
Oil Well Supply Co.
Peden Iron & Steel Co.
Reading Iron Co.
Republic Supply Company
Superior Tube Company
Williamsport Wire Rope Co.

Pipe Screwing Machines—
Buckeye Traction Ditcher Co.

Pipe Threading Machine—
Standard Engineering Company

Pipe Wrenches—
Continental Supply Company
Dunn Mfg. Co.
The Guiberson Corp.
Trimont Mfg. Co.
LeBus Rotary Tool Works
Republic Supply Company
J. H. Williams & Co.
Wickwire Spencer Steel Corp.

Portable Buildings—
Butler Mfg. Co.
International Derrick & Equipment Company

Portable Compressors—
Continental Supply Company
Sullivan Machinery Co.

Portable Drilling Rigs—
Bridgeport Machinery Co.
Continental Supply Company
Lee C. Moore & Co.
Oil Well Service Co.
Parkersburg Rig & Reel Co.
The National Supply Cos.

Pulleys—
Continental Supply Company
International Derrick & Equipment Company
Lee C. Moore & Co.

Pulling Machines—
Clark Machine Co.
Continental Supply Company
Iron King Mfg. Co.
Safety Pulling Machine Co.

Pumps—
Axelson Machine Co.
Bradford Motor Works
Continental Supply Company
D. & B. Pump & Sup. Co.
Frick-Reid Supply Co.
Gaso Pump & Burner Mfg. Co.
Goulds Manufacturing Co.
Lucey Manufacturing Corp.
National Transit Pump & Mach. Co.
Oil Well Supply Co.
Pelican Well Tool & Supply Co.
Republic Supply Company
The Reschke Machine Works Co.
Southern Engine & Pump Co.
Texas Oil Pump Co.
United Iron Works, Inc.

Pumping Powers—
Continental Supply Company
Frick-Reed Supply Co.
International Supply Company
Jensen Bros. Mfg. Co.
Kansas City Hay Press Co.
Spence Machine Co.

Refined Products—
Gulf Refining Company
Humble Oil & Refining Co.
Sinclair Refining Co.

Recorders—
Fort Worth Laboratories

Refinery Equipment—
Butler Mfg. Co.
Continental Supply Company
Graver Corporation
Kansas City Struct. Steel Co.
Oil Conservation Engineering Co.
Republic Supply Company
Smith Separator Company
Titusville Iron Works
United Iron Works, Inc.
Wyatt Metal & Boiler Works

Refined Products—
Magnolia Petroleum Company
Texas Company

Rig Irons—
Continental Supply Company
International Supply Co.
Lee C. Moore & Co.
Oil Well Supply Co.
Parkersburg Rig & Reel Co.
Republic Supply Company

Rotaries—
International Supply Company

Rotary Rock Bits—
Continental Supply Company
Hughes Tool Co.
Reed Roller Bit Co.

Rotary Fish Tail Bits—
Continental Supply Company
Pelican Well Tool & Supply Co.
Regan Forge & Engineering Co.
Republic Supply Co.
W-K-M Co.

Separators—
Butler Mfg. Co.
Continental Supply Company
Lorraine Corporation
Smith Separator Company
Trumble Gas Trap Co.

Structural Steel—
Butler Mfg. Co.
Kansas City Struct. Steel Co
United Iron Works, Inc.

Steel Derricks—
Continental Supply Company
Emsco Steel Products Co.
International Derrick & Equipment Company
Lee C. Moore & Co., Inc.
Parkersburg Rig & Reel Co.
Superior Tube Co.

Steel Crown Blocks—
Continental Supply Company
Gulf Coast Mach. & Sup. Co.
International Derrick & Equipment Company
Lee C. Moore & Co., Inc.
Parkersburg Rig & Reel Co.
Superior Tube Co.

Steel Storage Tanks—
Butler Mfg. Co.
Continental Supply Company
Graver Corporation

Stuffing Boxes—
A. W. Fawcett

Strainers—
Continental Supply Company
Emsco Steel Products Company
Layne & Bowler Co.
J. H. McEvoy & Co.
Pelican Well Tool & Supply Co.
W-K-M Co.

Sucker Rod Lines—
Continental Supply Company

Sucker Rod Elevators—
The Cunningham Co.

Sucker Rod Hangers—
Lorraine Corporation

Sucker Rod Guides—
H. Rickman
A. H. Brandon

Sucker Rod Hooks—
The Cunningham Co.

Sucker Rod Sockets—
Bradford Motor Works
Continental Supply Company
The Cunningham Co.
Brown Welding & Machine Co.

Sucker Rods—
Axelson Machine Co.
Columbus Sucker Rod Co.
Continental Supply Company
D. & B. Pump & Sup. Co.
Dunn Mfg. Co.
Frick-Reid Supply Co.
S. M. Jones Co.
The National Supply Cos.
Oil Well Supply Company
J. P. Ratigan
Republic Supply Company

Swabs—
Continental Supply Company
The Cunningham Co.

Tank Bolts—
Continental Supply Company

Tanks—
American Tank Co.
Butler Mfg. Co.
Black, Sivalls & Bryson
Columbian Steel Tank Co.
Continental Supply Company
The Brownell Co.
Gantz Tank Co.
Graver Corporation
Kansas City Structural Steel Co.
Maloney Tank Co.
Parkersburg Rig & Reel Co.
United Iron Works
Wyatt Metal & Boiler Works

Tank Deadwood—
Robertson-McDonald Lumber Co.

Tank Equipment—
Continental Supply Company
Johns Manville, Inc.
Oil Conservation Engineering Co.
Parkersburg Rig & Reel Co.

Tank Roofs—
Johns Manville, Inc.

Temper Screws—
Burns Tool Co.

Thermometers—
Continental Supply Company
Fort Worth Laboratories

Timbers—
Robertson-MacDonald Lumber Co.

Tongs—
Bridgeport Machine Co.
Continental Supply Company
Dunn Mfg. Co.
Guiberson Corp.
LeBus Rotary Tool Works
Pelican Well Tool & Supply Co.
Wilson & Willard Mfg. Co.
W-K-M Co.

Tool Joints—
Baash-Ross Tool Company
Bridgeport Machine Co.
Continental Supply Company
Emsco Steel Products Co.
Hughes Tool Co.
Pelican Well Tool & Sup. Co.
Regan Forge & Engineering Co.
Republic Supply Co.
W-K-M Co.

Tools (Fishing and Drilling)—
Acme Fishing Tool Co.
Bridgeport Machine Co.
Brown Welding & Machine Co.
Continental Supply Company
Frick-Reid Supply Co.
Houston Engineers, Inc.
Hughes Tool Co.
International Supply Co.
Oil Well Supply Co.
Peden Iron & Steel Co.
Pelican Well Tool & Supply Co.
Regan Forge & Engineering Co.
Republic Supply Company
Star Drilling Machine Co.
Sullivan Machinery Co.
W-K-M Co.

Toothless Slips—
LeBus Rotary Tool Works

Tractor Winch—
Rock Island Plow Co.
Twin City Company

Traveling Blocks—
Baash-Ross Tool Company
Boykin Machinery & Sup. Co.
Continental Supply Company
Gulf Coast Machine & Sup. Co.
Lufkin Foundry & Machine Co.
Regan Forge & Engineering Co.

Tret-O-Lite—
W. S. Barnickel & Co.

Tubing Catcher—
Continental Supply Company
Dunn Mfg. Co.
Guiberson Corp.

Tubing Lines—
Continental Supply Company
D. F. Connolly Agency

Tubing—
Continental Supply Company
Republic Supply Company
Reading Iron Co.
Superior Tube Co.

Underreamers—
Bridgeport Machine Co.
Continental Supply Company
Wilson & Willard Mfg. Co.

Vacuum Pumps—
Continental Supply Company
Sullivan Machinery Co.

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Continental Supply Company
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Peden Iron & Steel Co.
The Wm. Powell Company
Pittsburgh Reinforced Brazing and Machine Company
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Republic Supply Company
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Reading Valve & Fittings Co.
United Iron Works
W-K-M Co.

Walking Beams—
Continental Supply Company
International Derrick & Equipment Company
Lee C. Moore & Co., Inc.

Welding and Cutting Equipment—
Continental Supply Company

Working Barrels—
Axelson Machine Co.
Bradford Motor Works
Continental Supply Company
D. & B. Pump & Sup. Co.
Republic Supply Company
The Charles N. Hough Mfg. Co.
Southern Brass Mfg. & Plating Co.
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Water Gauges—
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Water Cans—
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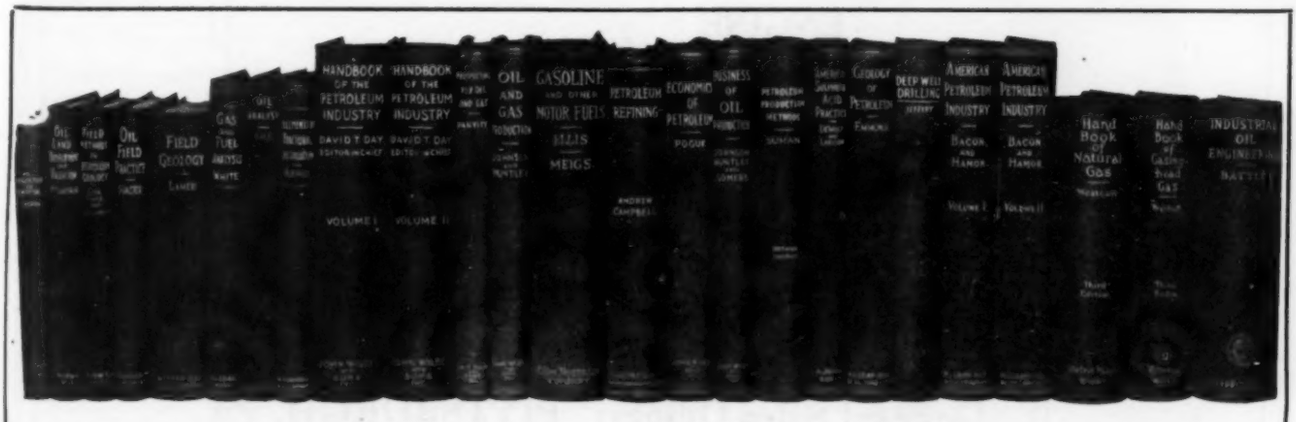

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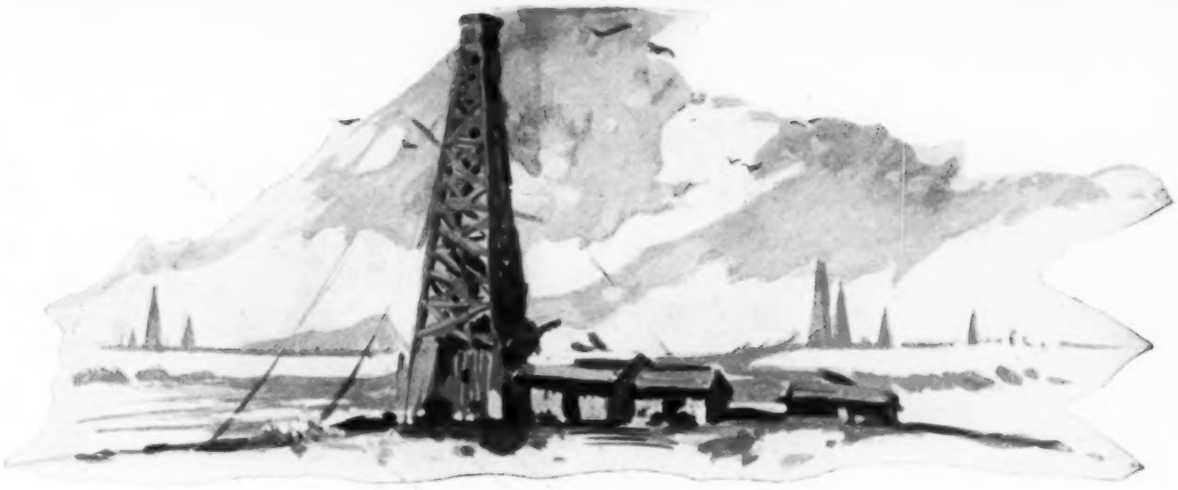

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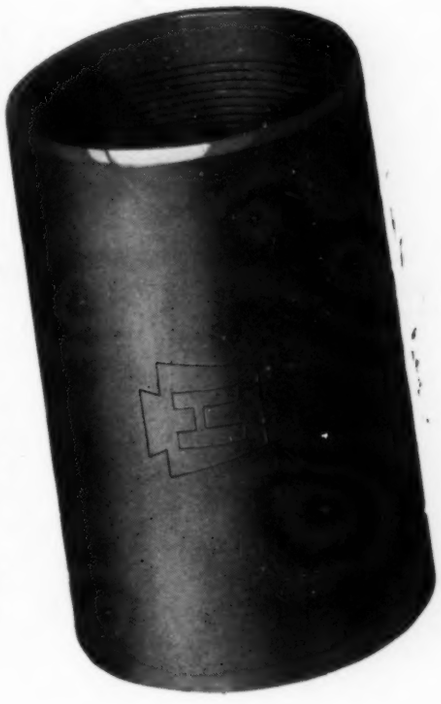

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